AMERICAN Cinematographer

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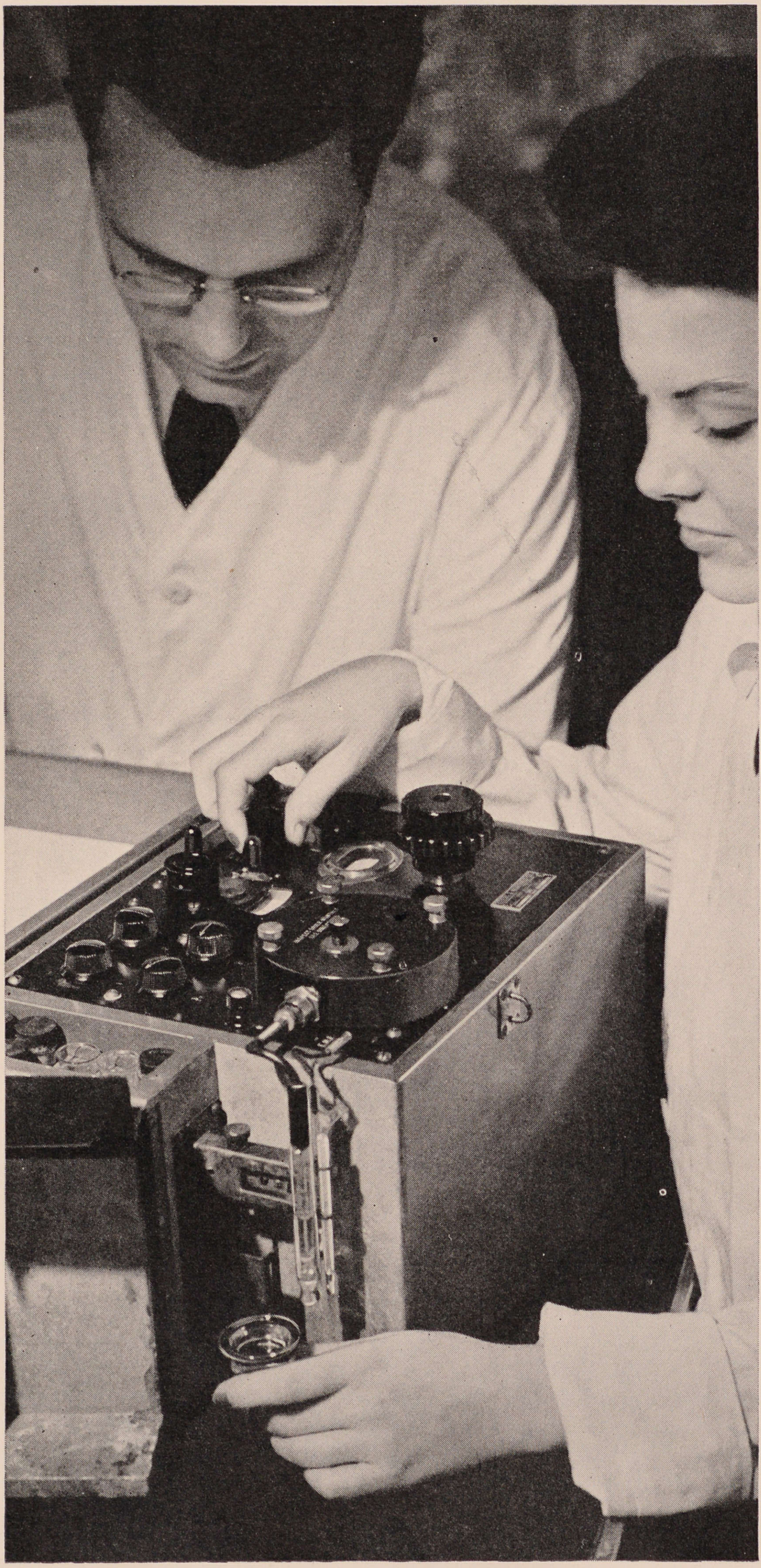
★ THE MOTION PICTURE CAMERA MAGAZINE ★

JULY
1943

A jury with an electric decision



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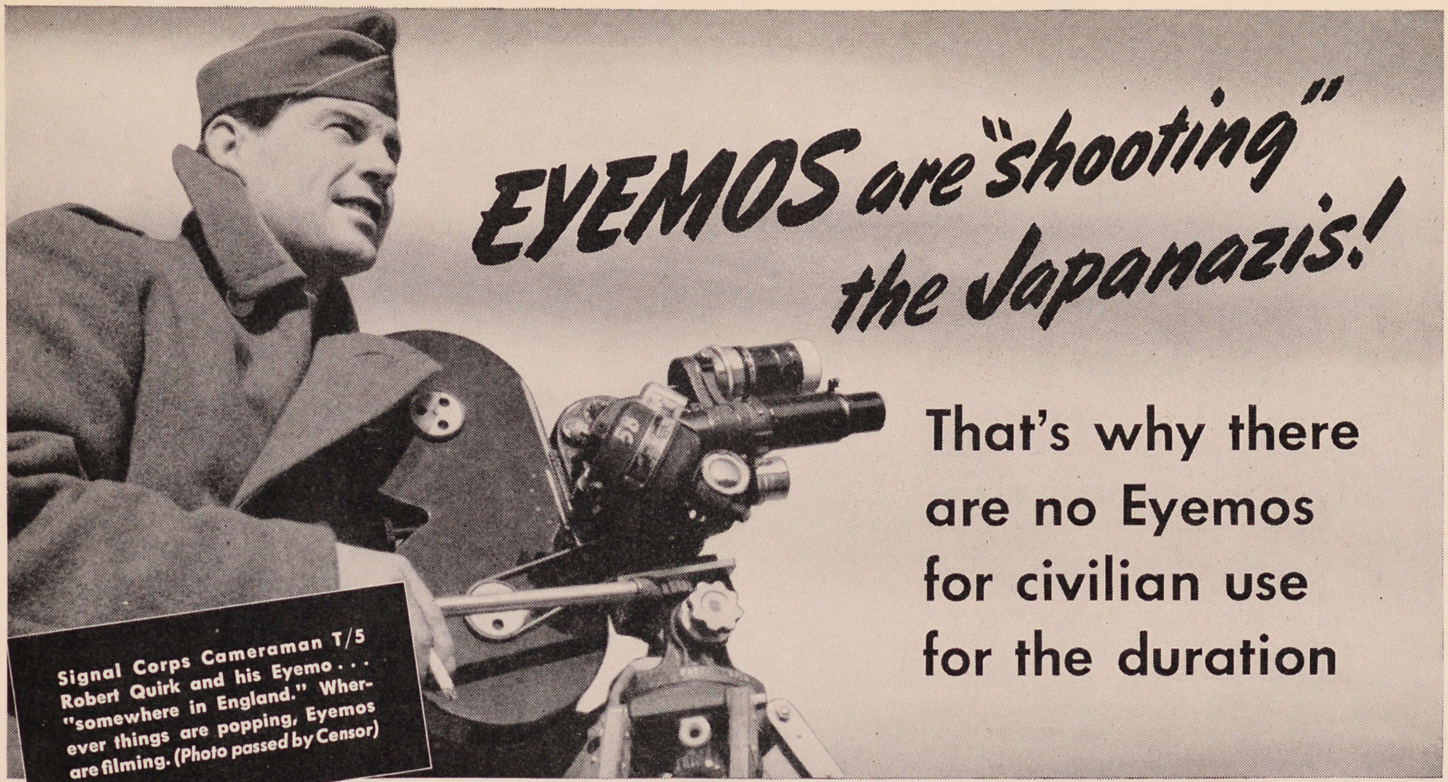

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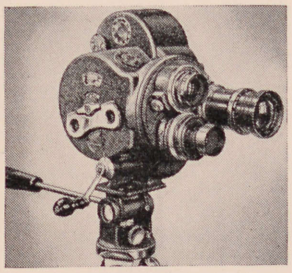

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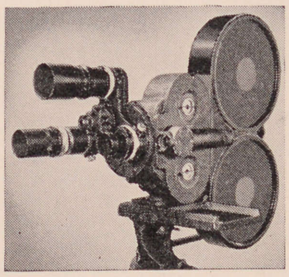

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AMERICAN CINEMATOGRAPHER

THE MOTION PICTURE **CAMERA** MAGAZINE

VOL. 24 JULY, 1943 NO. 7

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The Front Cover

This month's cover shows a unit from Canada's Associated Screen Studios filming a French-language short, "Un de Vingt-deuxieme," for the Canadian Film Board. Behind the camera (with earphones) is the late Lucien Roy, recently killed in line of duty. Note use of newsreel - type Wall single-system sound-camera, and microphone concealed behind the gate.

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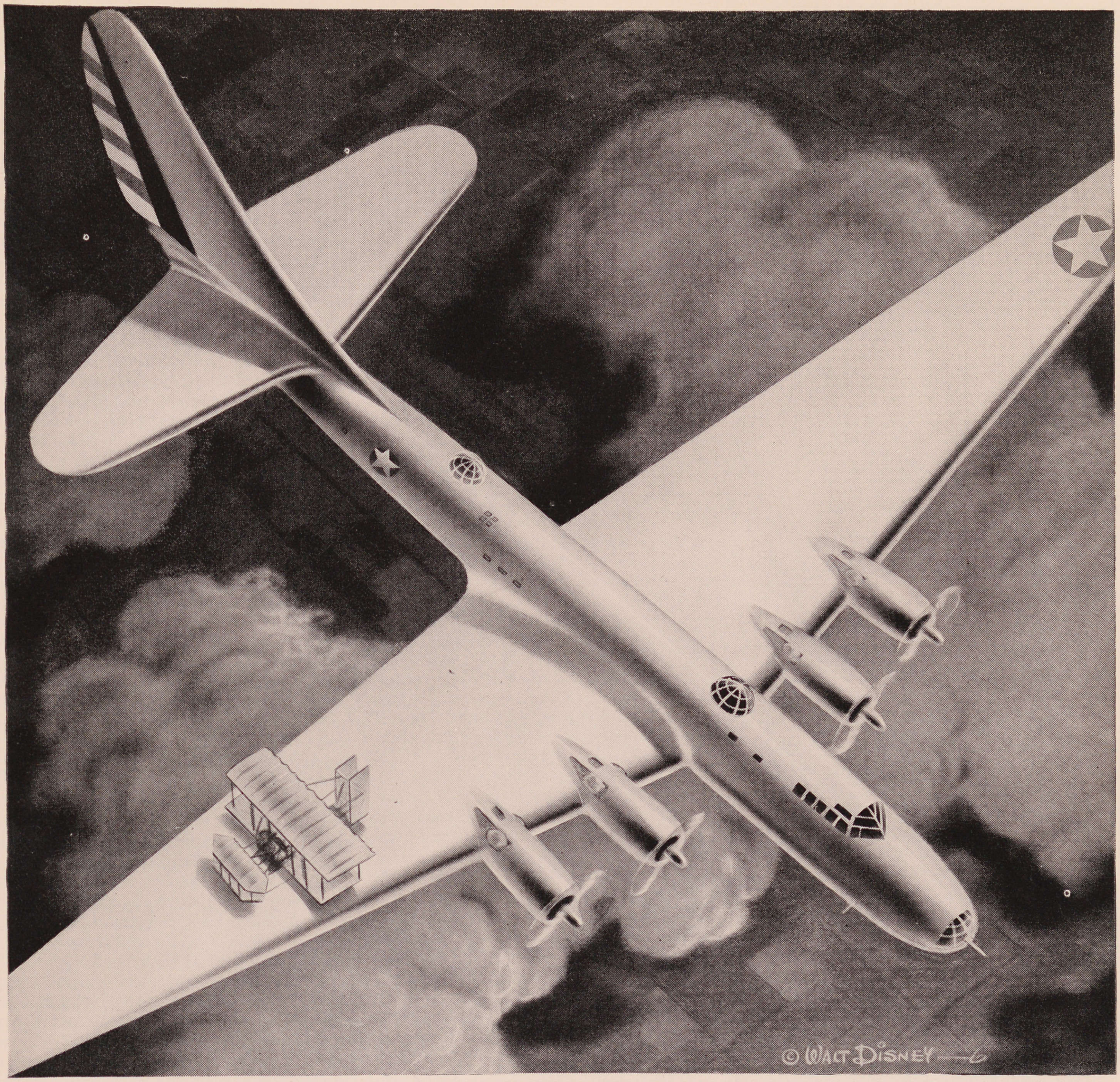

Illustration from the Walt Disney Feature, "VICTORY THROUGH AIR POWER," Major Alexander P. de Seversky's best-selling book.

*FANTASY OF FACTS...

"Fantastic!" would have been the word for the Douglas B-19 in 1903. For the Wright Brothers' epochal flight was only 120 feet—92 feet less than the wing span of the B-19. Yet, with a tail as high as a three-story building, this plane is only a promise of the mighty achievements still to come in aviation.

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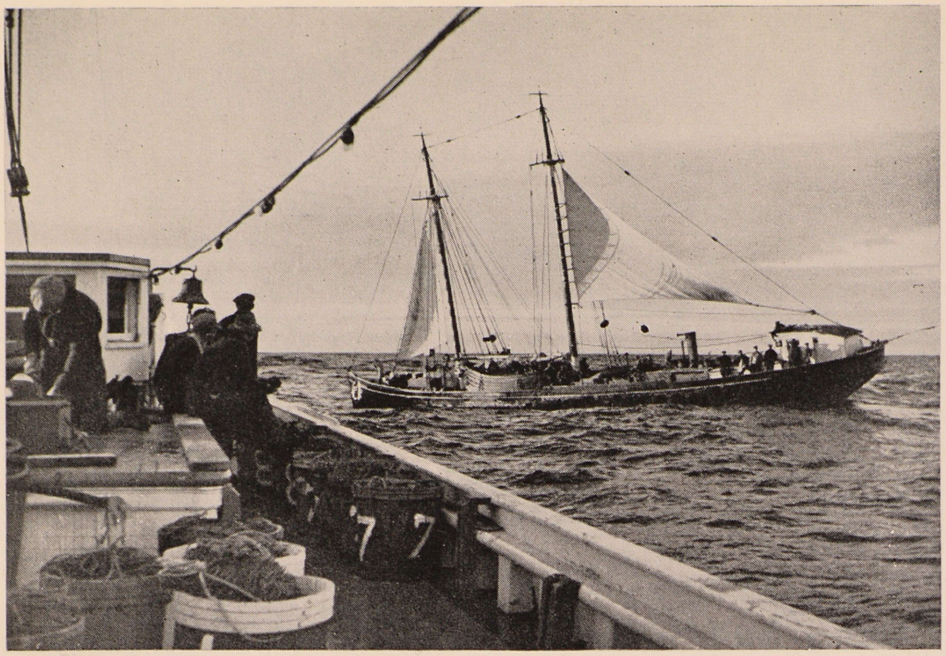

Making A Documentary Film At Sea

By EDUARD BUCKMAN

AFTER our shooting was over and we were in Halifax on our way back to the studios of the National Film Board in Ottawa, something happened that reflected our whole experience while making documentary films on East Coast fishing in Canada. Cinematographer Sinclair had to buy a pair of shorts. I went into the store with him. When we came out, he'd found not only shorts, but a suit and a sport jacket, and I'd gotten a top-coat. That was just the way with our films. We'd come expecting to find one thing—something quite ordinary like shorts — and we'd run across something unique — like Bond Street clothes.

It had happened before on our documentary expeditions. No one without first-hand knowledge of a section can sit miles away and expect to write a script about the section which will be correct. Research never seems to turn up just those things which bring a film to life. For instance, we went up to the James Bay area to do a film on trapping with the expectation that there were white trappers and kindly, bearded Hudson's Bay company factors.* What we found were Indian trappers and a Scotsman in a business suit who, as *post manager* (not factor), prided himself that his store was as up-to-date as any city establishment.

When, last summer and fall, we were assigned to the Nova Scotia fishing front, our ideas were as mixed. We were to feature the fishing co-operatives, "marvels," we were told, of communal achievement, where the humble fisherfolk, banding together in the face of the depression and the oppression of industrial magnates, had literally pulled themselves up to prosperity by their own sea-boot straps! Another member of the Film Board staff had done the preliminary research; and when it was decided that the Sinclair-Buckman Unit, because of its experience in the "roughing-it" type of location, was best qualified to make the film, his files were turned over to us. Of his tentative scripts, one, we later found, was almost a word-for-word transcription of a chronological account of a day on a fishing boat as set forth, for children, in a Nova Scotian grade-school textbook (published, if we recall aright, in 1912).

All of this has only reinforced the attitude Douglas Sinclair and myself have always had about making documentary films. You have to go to the section in question, live among the people, gain their confidence and then report photographically what is there, not what you wanted or hoped to find, if the film is to have validity and truth.

I intentionally write *validity and truth.* They do not necessarily mean that the documentary will, *as a film*, be good or interesting. Had we conscientiously done the co-operatives, our film, if true, would have been depressing. Our survey showed the co-operatives to be such in name only: a few fishermen with a little capital and encouraged by a religious organization with a government grant, had, in a given community, set up businesses and were themselves—*not the community as a whole*—receiving such meager profits as there were. In Little Dover (where it was suggested we work because sociological sermonizers had cited it, in book after book, as Nova Scotia's finest co-operative effort), we found that, three months after the inhabitants had built and operated their own lobster-canning factory, over ninety percent of the families were again on relief! Such conditions, if re-enacted for documentary purposes, might provide good propaganda, but wouldn't make good publicity. And our films, however documentary in intent, were designed to show Canada favorably on educational screens outside the Dominion.

I write "documentary in intent" without scruple or reservation. Having, as a unit, produced four films for the National Film Board, Douglas Sinclair and myself certainly have the right to call ourselves documentary film makers. But although we were trained in the school under John Grierson, the dynamic Scotsman who personally promoted the documentary from a sporadic and unrecognized occurrence to its present established place on the screens of the world, neither of us are able to define exactly what a documentary is. To those who grew up in the Grierson school in England, documentary undoubtedly suggests propaganda. But to those of us who grew up in a new country like Canada, it is impossible to place old-world ideas upon new-world realities. So when the two of us were faced with tangible realities, like the North or the Nova Scotian fishing scene, we just had to discard preconceived ideas and go to work on what we found about us.

What we finally found about us in Nova Scotia was Lunenburg. In our survey of the co-operative ground we'd driven through the town and been entranced with its photographic possibilities. Further, as it was the most important fishing center in the area and as, after all, our film was to treat the fishing industry, we decided to make our picture there.

With a town like Lunenburg, which is a Scandinavian dream come to roost on North American soil—every ornate gable, dormer, roof-tree of the wooden houses brilliant with paint (Lunenburg County is said to use as much as all the rest of the province!); with the waterfront a floating forest of tall, spare spars, against which fishermen in sea-clothes shoulder great bundles of sails, carry them past the patient oxen hitched to the carts of dried fish before loading platforms; with the schooners themselves, each a world of its own, a community going by itself far out into the

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*(See 'The Indians Had a Word for Us," AMERICAN CINEMATOGRAPHER, August, 1942, p. 350.)

Atlantic; with many of the fishermen coming from adjacent villages where tiny houses vividly dot the rugged grey-blue rolling rocks washed by the green-blue sea: with all these things, is it any wonder that, as documentary film makers, we hardly knew on what to focus our cameras?

Besides, we were working in Kodachrome. And color, in a way, is a handicap to documentary treatment. It itself can create effects likely to take the spectator's attention away from the ideas behind the picture. To make a propaganda documentary in color anywhere is decidedly difficult. It appeared an impossibility in Lunenburg where the rigged ships, the fishermen, the ox-carts, all seemed to belong to another age, to have no connection with the effect World War II had on Canadian fishing (the revised theme of our film).

However, the guiding principle behind any documentary was what actually made our decision for us: *feature the most important thing.* That, of course, was fishing. But it was a pretty all-inclusive subject, for there were the little in-shore boats which worked the waters a few miles off-shore, and there were the schooners which went a couple of hundred miles out to the Banks. And there was the human side, too: the way the fishermen lived in the villages and aboard the vessels. We drew up a tentative outline script, calculated to show a little of the life in a typical village—we chose Blue Rocks, photographically ideal—then follow its men, first the in-shore fishermen, then those who did the deep-sea fishing on the schooners.

Now any documentary film-maker has to beware of delusions of grandeur. I'm not speaking in the color sense. I mean he is definitely limited as to the amount of material he can hope to include in a two-reeler. With Kodachrome the price it was (and is more so now), anything longer than two reels isn't acceptable to the average budget of a 16mm. film library. But the more we saw of the life about us, the more we wanted to include in our film. Besides, there literally seemed no end to the color possibilities, and the more we saw the warmth of these, the farther away went the cold counsel we'd received about the economic wartime fishing which the documentary was intended to reveal.

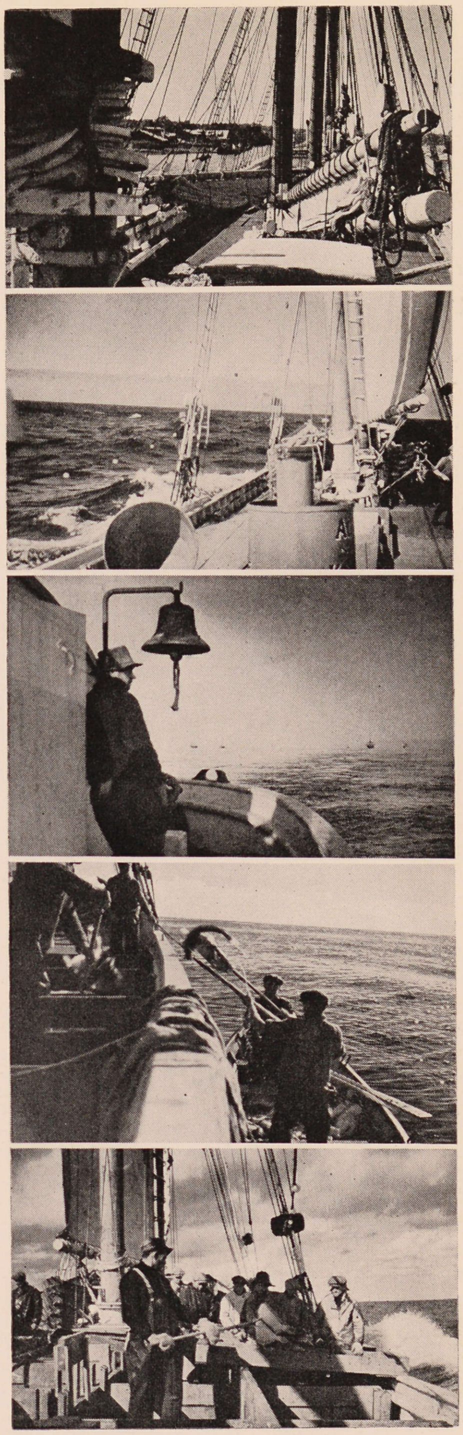
We did the village first. The material presented no difficulties except for certain interiors absolutely essential if the documentary were to suggest the social life in the village. This breaks out sporadically in big get-togethers, known in summer by the misleadingly refined name of "garden parties" and in the winter by the more plebian and accurate appellation of "chowder supper." The main feature of the evening is a continual supper—served from nine to midnight—at long tables facing the walls of the hall where the gatherings are held. With inadequate power supply for our lights, our problem was to photograph the extent of these fifty-foot tables, something which had to be done if the film were to accurately document the occasion. Cinematographer Sinclair solved the problem by mounting the camera on a three-wheel collapsable dolly and making a dolly-shot down the table, his camera covering a field of some 8 feet, while the power company electrician and myself walked on either side of the camera, each keeping a No. 4 Victor focused on its field.

Where our illusions of grandeur came up against the most aggravating inhibitions was on the "Flora Alberta." She was a deep-sea fishing schooner, one of the newest vessels in the Lunenburg fleet. A craft of some 100 tons, about 125 feet in length, her lines were long and rakish in the best Bluenose style. She had just been repainted and had become something a color cinematographer might dream about for the tortured nights of a lifetime, and never expect to behold in his waking moments.

Above the hull, black with gold trimmings, her decks were green and red, with white pilot-house, hatches, bulwarks and railings. Two thick masts rose in varnished yellow to hold white sails. Up fo'r'ard were stacked the dories—small 18-foot flat-bottomed boats from which the men did the actual fishing. One stack of six was yellow with green trimmings; the other, red with white. The dory gear—line tubs, high-flyer bouys, masts and sails—was multicolored. Given such a background, the men themselves supplied the final touch of color perfection through their yellow oilskins and vivid checked shirts. Cinematographer Sinclair claims all one had to do was to stand anywhere on the deck and focus the camera, and composition automatically resulted. Naturally, that's exaggerating. But certainly, for anyone knowing what he wanted, everything was at hand on the deck of the "Flora Alberta."

Delays seem inevitable when one is making documentaries. Before we could sail on the "Flora Alberta" we had to wait for the paint to dry. Much of the time we passed in the captain's cabin, getting details about the routine on the week to ten days' fishing. In documentary work, our method has always been to get an idea first of what is to happen —and get it from those who do it, not from those who merely write about it— and then try to cast this information into film form on paper. And then, before doing any actual shooting, check everything against actual performance and make script revisions accordingly. So, while waiting for the paint to dry and then waiting for the weather to clear— we had three days of torrential rain, September 21st, the equinox!—we drew up a tentative shooting script for the deep-sea fishing.

Finally the sun came out, and with our shooting notes, the Eastman Ciné-Special, two Filmo 70-DA's, 20 100-ft. reels of Kodachrome, a Leica, an Exakta and still film, we set sail one fine high noon. How beautiful it was sailing through the harbor narrows! But the open sea wasn't so beautiful. From equinoctial storms, the waves were running high. Seaworthy a Bluenose schooner may be, but she *can* roll.



Above and on opposite page are scenes from the film director Buckman and cinematographer Sinclair madeof Nova Scotia's "Bluenose" fishing fleet. Above, top, the "Flora Alberta" at her dock and at sea; center, on watch while dories are out setting lines; bottom, loading in the catch. Photos by the author.

When we decided to get a shot of the vessel from the aft cabin roof we learned the precarious angle of which a Bluenose deck is capable. No tripod and camera could have stayed on the pitching roof. Then the crew, whose sea-legs were the steadiest things aboard, came to our help. Three of them lying flat on the cabin roof each held a leg of the tripod, and a fourth, his arm hooked around a guy-rope, held the cinematographer while he somehow got his meter-reading (which, because of the brilliance, required that he shield the "eye" with his cupped

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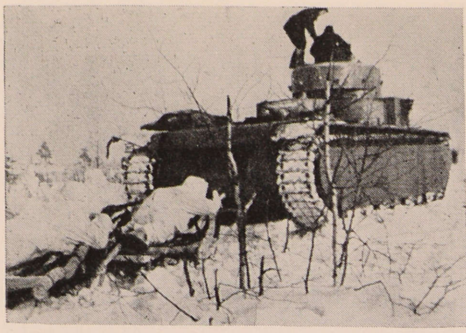
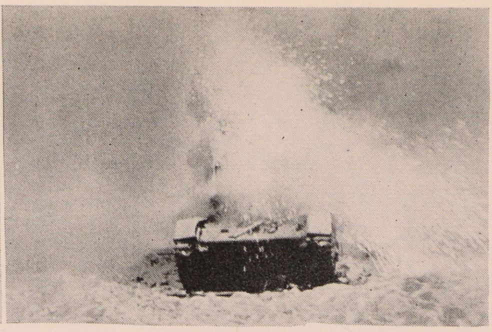




With The Advancing Army

By ROMAN KARMEN*

Translated from the Russian

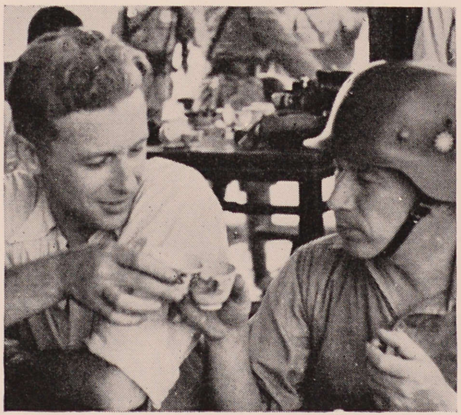
By George Krainukov

THE offensive began at daybreak. Our Soviet infantry broke through the fortified line of German defense. On the very first day of the advance our troops, by direct frontal storming and by clever flanking attacks, dislodged the Germans from many populated points, and when on the following day the snowstorm which had made camerawork impossible for my comrade cinematographer Bobrov and myself, died down, the battle was already rolling in waves, farther away from us to the west. And following in the footsteps of yesterday's bloody fighting the reserves were moving forward—infantry and tanks coming up, and artillery moving forward the better to batter the retreating enemy.

We, too, followed in the footsteps of the battle. Amid the fields scattered with dead heaps of burned-out German tanks, Nazi corpses, and disabled German cars, guns and cartridge-cases, was many a mute tableaux which at a glance told its silent story of victory and defeat. Here, in front of an anti-tank gun destroyed by our shells, are piles of spent cartridges . . . several Nazi corpses . . . and on all of these are the imprint of the heavy treads of a Soviet tank. Wordlessly these told their tale: the Germans had shot at the tank, firing with increasing speed and desperation as the advancing monster drew nearer; but the tank, like our now-advancing Allied armies, relentlessly overpowered the Fascist bandits, ground them into the earth, and plowed farther on, to repeat its job again and again on other enemies.

As we finally reach the front of the little sector to which we are assigned, we see the field in front of the German fortifications covered by the fire of dozens of machine-guns, light guns and automatic rifles. Our troops, without giving the Germans a moment's rest, storm these fortifications. Our artillery covers the German ramparts with a murderous fire. Our bombers drop their deadly cargo. Our mortarmen add their thunderous salvos to the hail of explosions which seem to make earth and air alike tremble with the fire with which our warriors of all arms deluge our enemies.

For a cameraman, working on this sector of the Central Front is a problem. Our duty is to film the action of the Red Army as it conducts an advancing battle. Against us we have not only the fire of the enemy and sometimes the speed of his retreat, but also our ally—militarily good but often photographically very bad—the Russian winter. Yesterday, on the first day of the attack, we battled a snow-storm; the soft, fresh snow covered our lenses like a clinging, white paste, and swirled through the air so thickly that one could not see objects only a few yards away. But today, with a clear, blue sky and the sun sparkling over the valley in which the battle is unrolling, we look eagerly forward to getting some fine scenes.



Through a remarkable coincidence we learned that the author of this article, Cinematographer Roman Karmen (left) and the translator, Cinematographer George Krainukov (right) were personal friends, as this picture, made in 1938 in Hankow when they were "covering" the early stages of the Sino-Japanese war for the Soviet Kino-Journal and Universal Newsreel, respectively, shows.

To make our way up to the front lines is not an easy job. At 10 A.M. sharp, our artillery again begins a preparatory softening-up barrage. Over our heads screams the continuous din of the endless flight of our shells toward the enemy positions. Around us, guns of all calibres are barking. Long ago we had left our shelter of the night before. Now our job is to go forward as far as we can—close to the enemy, where we can see and photograph his positions in the village toward which our attack is progressing. We must be in lens-range of the bursting shells of our artillery . . . close enough to film how the waves of our infantry advance, and the work of our dive-bombers overhead, pouring down their rain or bombs!

The farther forward we go, the more often we have to crouch, or even throw ourselves on the ground: not all of the enemy's artillery is destroyed yet, and the German guns are replying quite strongly across the valley. When we hear the familiar, disgusting shriek of an approaching German shell, we, with cameraman Bobrov, duck hastily into what only yesterday had been the German trenches. Out here, beyond the original first line of Nazi defense breached yesterday by our troops, on every hand we see either a dugout, a gun-emplacement or trenches. As we move forward, we must keep strictly on the trail, for elsewhere at every step one is likely to tread upon a hidden German land-mine which our sappers have not yet had time to dig out and render harmless.

At last we reach the observation-post of one of the farthest-advanced companies. From here we can survey the field of battle like the palm of one's hand. Over there is the village toward which our troops are advancing. At last we can begin our shooting!

But good war films cannot be entirely long-shots. We must get closer yet to the village . . . closer yet to the battle we see progressing . . . right into the thick of things, where we can get really close shots of the action!

Bobrov and I discuss our plans with the commander of the unit here, requesting permission to get into a tank and roll ahead with it to a point where we can get the real battle-shots that are our aim. This permission granted, we quickly arrange our plans with the

(Continued on Page 276)

No screen test is necessary to tell you that Peggy O'Neill (left) and Harald Ramond are good screen bets—especially when photographed by skillful Hollywood cinematographers. (Portraits by Maurine.

Screen Tests Aren't Necessary!

By CHARLES R. ROGERS

President, Rogers Productions, Inc.

THE other day a very pretty 19-year-old girl named Peggy O'Neill was brought to my office by her agent, Leon Lance. She was looking for a screen career.

Peggy explained that she had no experience in films, had never been in front of a motion picture camera, so consequently had no screen test to show me. We chatted a few minutes about her background and education and her few appearances on the stage of the San Francisco Community Playhouse. She then read some lines from a script and I immediately signed her to a long-term contract.

"But you don't mean to say you signed her without making a screen test of her!" exclaimed one of my friends when I had told him about my new "find".

His exclamation brings me to my point. I do not believe it is necessary to make a screen test in selecting talent because the Directors of Photography in Hollywood have become such masters of their art that you need have no fears over how a man or woman is going to look on the screen. Especially is this true when your own eyes tell you that the girl you are looking at is photogenic. So why waste film—particularly in these days when it is so scarce—on a "test" that will only tell you something that your eyes and your past experience with cinematographers will have told you already?

As a matter of fact, there are some very positive arguments against making screen-tests of talent, anyway. For one thing, a player—even an experienced one—making a test for a contract or an important part is almost certain to be nervous, so nervous, often, that he or she won't perform as freely as on the actual production. Then, too, there is likely to be some tendency among the crew—the director, the make-up man, the stage crew and sometimes even the cinematographer—to more or less "walk through" a test just because it is "only a test," and they will know that both they and the player can and will do better when the production itself starts. You need only look into the files of any of our studios, where you'll find condemnatory verdicts on tests of players other studios later signed and built into stars, to realize how unfair and unnecessary such tests can be.

There have been, and still are, many stars who owe their screen glamor to the cinematographers. These players recognize the fact and in many instances demand that only certain cameramen photograph their pictures.

It would not be fair to mention names in this article, but we in the picture industry know that the art of our cinematographers hides even scars and blemishes on the faces of some of our stars. Some feminine noses that are anything but beautiful become actually glamorous on the screen because of the manner in which our cameramen can photograph them. Some eyes that are actually "washed out" and lusterless take on vivacity and sparkle because of our cameramen's tricks of lighting.

These cameramen are artists in the use of lights and shadows, using the highlight to accentuate the best features and soft shadows to subordinate the less favorable ones. I have seen some of these artists, lighting a close-up of a not particularly glamorous girl, blend in decorative shadow-patterns on the back-wall with the lights and shadows on the subject giving his composition a delightful softness that made the girl seem gorgeously beautiful. Our photographers have developed a technique which I call "suggestion". A *suggestion* of glamor is given—and the imagination of the audience does the rest.

For a number of years, many stage stars who knew they were not glamorous, shunned the films for fear they would not be able to compete with what was known as the typical film glamor-girl. There were some producers, too,

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The Rhapsodic Technique

By E. S. ROBERTS

THE Office of War Information has accepted "The Thousand Days" for distribution in the United States—the first Canadian-produced motion picture to be placed on their list of War Films for War Use. It is recommended for use in programs to promote United Nations unity.

This subject, produced by Associated Screen Studios of Montreal, is interesting on other counts as well. Independently produced for original theatrical release, it is the first authentic motion picture record by Canadians of Canada's war years—covering the first thousand days since September, 1939, when Canada declared war on Germany.

Perhaps of greater interest is the technique used by the producer in telling the story of Canada's first three years of war, as exemplified in "The Thousand Days." Gordon Sparling, production supervisor for Associated Screen Studios, directed the two-reeler, and coined the term "rhapsodic" to describe the treatment of this Canadian cameo production. It does suggest a new and specific form in the art of motion picture expression.

The technique used here has been termed "rhapsodic" since the story is told by linking otherwise disconnected bits and pieces. Visually and orally there are a large number of disconnected sequences. Each by itself has little or no meaning, yet blends in natural relationship in the complete composition.

As in musical expression, the rhapsodic treatment uses recurring themes to carry the pattern with sweep and flow. Visually, characters may be introduced repeatedly to provide conjunctive individual scenes.

Recurring words or voices also serve this purpose, as do repeated individual sounds. Repetition of musical themes serves to build an emotional climax from these seemingly disconnected bits.

The rhapsodic technique has been employed experimentally in a number of Associated Screen pictures, but "The Thousand Days" was the first two-reel film making use of this style throughout. As with any new variation in artistic treatment, there is an understandable reluctance to venture away from tried and proven methods. It was not until the producer had partially proven the effectiveness of the technique in previous films and had a vehicle which seemed ideally suited to the new style, that it was given a fair chance to prove itself.

Gordon Sparling does not look on "The Thousand Days" as an example of the perfection of the rhapsodic technique, but does feel that much has been done to crystallize the basic factors employed, and particularly that it hints at the possibilities for developing an interesting and powerful form of film expression.

Many of the effects are admittedly subconscious—not in themselves noticed by the audience—but they provide important undercurrents in the progression of the story.

The first experimental use of the rhapsodic technique was about ten years ago in the production of "Rhapsody in Two Languages" . . . an interpretation of the life of bi-lingual Montreal from dawn to dawn.

Since that time, it has been employed for sequences in a number of other pictures . . . for instance in "The Kinsmen" . . . which was produced for The Canadian Wheat Board. The rhapsodic technique was employed to good effect in one sequence to describe that period of suspense from the spring days when the seed had been planted until it was safely harvested. The days between are fraught with worry for the prairie farmer. Three common items are repeated over and over again . . . farmers gazing at the sky . . . farmers at their radios listening to the daily crop reports . . . the wheat itself gradually growing to maturity. Whispering voices are heard in a slow rhythm, saying, "No frost" . . . "Enough rain" . . . "No hail" . . . The passage of time is indicated by a vibrant voice punctuating the sequence with "June" . . . "July" . . . "August" . . . and, blending through it all, an orchestral score which starts with tremolo violins and gradually builds up to a crescendo of strings and woodwinds interrupted by stabbing trumpet notes expressive of the farmers' thoughts and worries.

The rhapsodic technique differs from the dramatic or the documentary in that there is less obvious progression. In the dramatic treatment, the plot is developed through words and actions of the characters used. In documentary, a commentator delivers a lecture illustrated by scenes . . . scenes which are usually chosen for their factual rather than their aesthetic value. In the new rhapsodic technique, seemingly unrelated bits of action are used, eavesdropping on snatches of conversations, employing only the key bits of scenes—but always with some sort of bridging, either visual, vocal, or musical. No one commentator carries the main theme, but many voices may be used, some of them by visible characters, others merely as thoughts.

In "The Thousand Days," a newspaper editor lifts a phone to reveal a thread that carries the story. Overhearing his conversation with an assistant, we learn something important is happening. The editor answering the phone, and the hammering teletype, give us the answer.

Two quick scenes dramatize that answer . . . first a storm cloud obscuring the sun, and then a quiet hospital room, during which an impersonal voice says: "September third, nineteen thirty-nine. In Europe, a storm broke. In Canada, a child was born . . . into what sort of a world?"

A new era dawns with the declaration of war, and what came out of it is represented by that baby. Its later appearances in the picture have the double symbolism of Canada's growing war effort and its bearing on the character of the new era. The second appearance of the infant, in its mother's arms, at the end of the first year, adds to the symbolism of the war effort and its development, and provides an opportunity to slow down the pace for building to a later climax. It also provides the basis for an emotional change as we bring in the idea of 'women without men' carrying on.

The inactive first winter of the war, with its conflicting opinions and uncertainties, is treated rhapsodically by a matter-of-fact scene of two stock-brokers examing a ticker tape which says "December, 1939 . . . Nothing to Report." One stock-broker says, "Funny kind of war this is," and the other replies, "*Funny* war? . . . It's a *phony* war, if you ask me." The elements of this scene not only plant a mood in the minds of the audience, but supply a pictorial theme for providing continuity for the sequence. In other words, the war is a thing far off. It touches people only indirectly, as when the news comes over their ticker tape.

Another flash of the tape says "January, 1940 . . . Nothing to Report." Then a flash of our newspaper editor amused by a dispatch showing the ponderous pace of the war machine.

The ticker tape again: "February, 1940 . . . Nothing to Report." A businessman, symbolic of the complacent attitude of the Chamberlain régime, comments: "Well, I think we've got Hitler bluffed. He doesn't dare risk a first-clas war."

Again the ticker tape. "March, 1940 . . . Nothing to Report." Then, for contrast, the thoughts of a working man who, on the average, was perhaps not as sure of the "good" state of affairs. A machinist would have done . . . a lathe- or milling machine-operator. But in the final script a figure symbolic of them all, yet logical, evolved—a blacksmith.

He is used to bring to a climax those days when the war seemed to be a waiting stalemate. The blacksmith at his anvil stops with hammer poised to say to a friend: "All this talk of Hitler making peace proposals is the bunk. He's getting ready . . . and when he's ready, he's gonna strike!"

That last word is emphasized by his hammer striking the anvil. The brief scene immediately following is of a newsboy shouting "Hitler strikes!" as he holds up his papers. The headline reads "Norway Invaded." The anvil rings again, to complete the conjunction of the two sequences. Other newspaper headlines flash by: "Denmark Bows" . . . "Holland Overrun" . . . "Belgium Beaten" . . . "France Falls"; . . . and, as each appears, the anvil is heard again. The rhapsodic use of the image, visual or auditory of "striking" thus not only advances the story, but plants an idea which will be used for the final climax of the picture.

It is the spirit of the ordinary man and woman which will win the final victory. So it is natural that the blacksmith should appear for the picture's tag line. A number of types set the scene, as one after the other they appear, in big close-ups, to speak a short phrase, or just a word: "We have stood up to the enemy." . . . "We can strike back . . . " . . . " . . . harder . . . " " . . longer . . . " . . . "Now it's our turn . . . " (and here the blacksmith is again seen at his anvil) . . " . . . to choose when and where we strike. And, when we do . . . watch out!" The repetition of the clanging hammer on anvil carries through the fadeout into the end-title music.

There are perhaps a few other instances which might bear quoting to demonstrate how symbolism may be employed in the rhapsodic technique, and how unrelated scenes may be integrated in logical sequence.

Close-up of an alarm-clock. Time: 7:35. As a voice says: "At dawn on war's eight hundred and twenty-fifth day . . . ", the alarm commences to ring violently, coming to extreme close-up, showing the words "MADE IN JAPAN."

The ringing of a telephone bell blends with that of the alarm-clock. A man answers. "Hello . . . yes . . . Washington and Ottawa . . . right . . . to the West Coast."

Then a babble of voices and flashing scenes—Soldiers marching, "To the West Coast." Planes in the air, "To British Columbia." Destroyer at sea, "To Alaska." "To the West Coast." This is followed by quiet scenes of the Japanese fishing-fleet interned, and voice saying, "Now the democracies knew! At last the masks were down, and friend and foe stood clear"—thus was told the story of Japan's entry into the war on the side of the Axis, in rapid tempo, in rhapsodic style.

Another example: Newspaper headline: "Hitler attacks Russia!" Scene in a club, one man reading a paper looks up to say: "So another stab in the back gives us a new friend." Another man: "Looks bad. I suppose it will be the same thing again. The Germans will go through them like . . . " Scene and sentence are cut off, replaced by factory worker, his buzz-saw cutting through wood. "But as long as they can tie up Adolph's armies, they are giving us the chance of a lifetime."

There is no ordinary continuity between a rather smug scene in a men's club and a woodworking shop, yet these two brief flashes are made to bear a logical relation in the rhapsodic treatment. By taking two conversations—the one between two men in their club, the other between two factory workers—either of which could have been complete in itself, and cutting them in such a way and at such a point that one seems to answer the other, there is achieved a continuity typical of the rhapsodic technique.

The rhapsodic technique is particularly suitable as a means for compressing much into a short-length film. It is not a style to use for leisurely development of a story, but, like its musical namesake, is rather a treatment for telling a story in which contrasts and rapid emotional changes are required. It is useful in bridging wide gaps in time and place.

Rhythm is important in the successful use of the rhapsodic technique. This applies not only to the action, the sounds, and the music, but especially to the actual cutting. The dramatic and climactic effect of a sequence may often be heightened by "rhythmic cutting"—that is: where the physical lengths of scenes is exactly the same, regardless of the action in them individually. This requires careful choice of action to insure that the most significant portion of each is retained. By careful planning, an entire sequence may be composed of, say: 3-foot (2-second) scenes. Thus, there is a purely mechanical and subconscious rhythm implanted on the audience. If desirable, these lengths can be gradually reduced to speed up the tempo toward a climax. This, of course, is not a new principle, but it is a method which proves itself particularly adaptable to the rhapsodic technique.

In "The Thousand Days," 80% of its scenes were not more than five seconds in length. This required careful writing, to make every spoken word significant to the point that was being made. It required painstaking rehearsal and shooting to assume the proper tempo within

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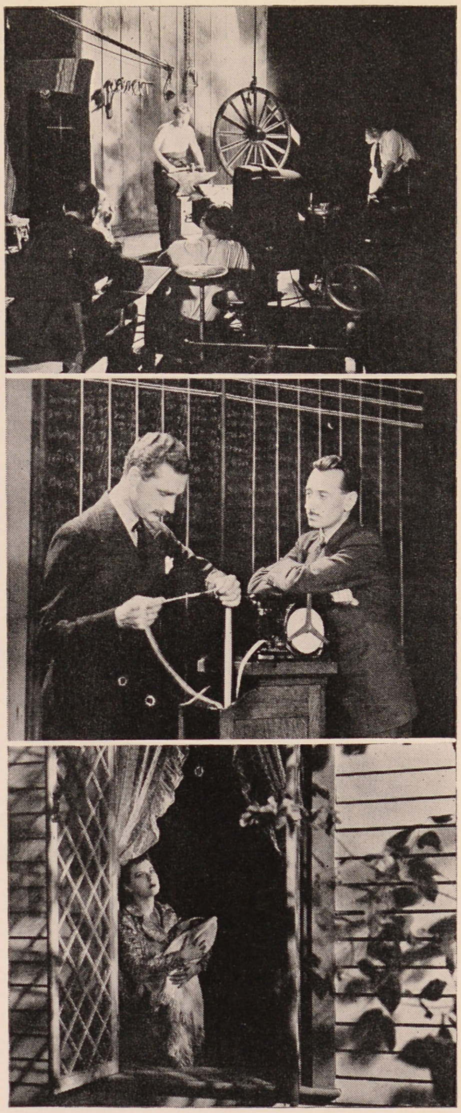
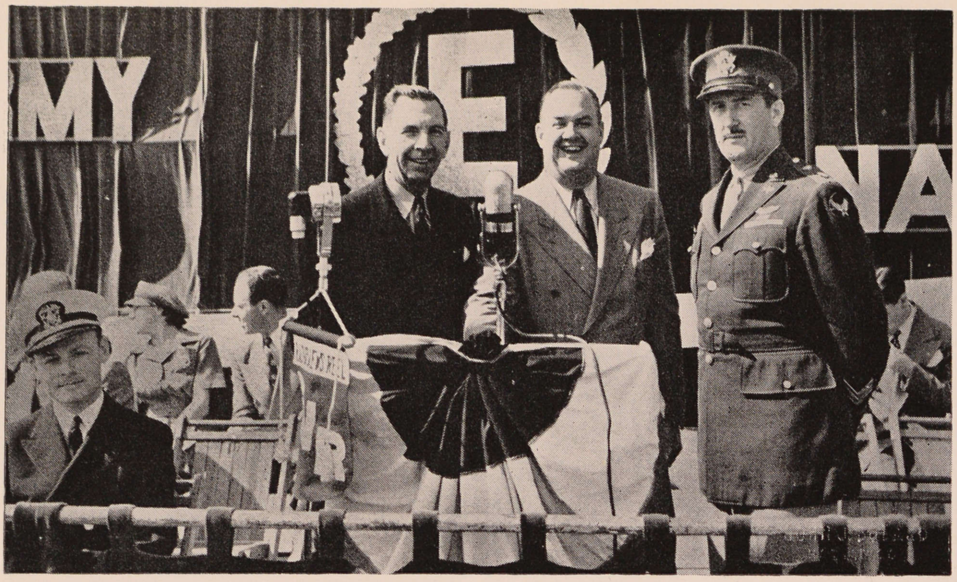


Above, several of the disconnected thematic visual elements interwoven to make "The Thousand Days." On opposite page, a photomontage of some of these elements which were used, however, as straight cuts, rather than as superimpositions.



HOLLYWOOD'S FIRST "E"—Cecil Bardwell (left, standing) receives the Army-Navy "E" Award for excellence in War Production.

Hollywood's Own War Plants

By WILLIAM STULL, A. S. C.

IT isn't revealing any military secret when one admits proudly that the many major firms which have so long supplied Hollywood's studios with cameras, film, lenses, sound equipment, and the like are now diverting all, or at least a major part of their production to the War Effort. But it is not so well known that many of the smaller organizations located directly in the film capitol, and which have provided the industry with such specialized equipment as lighting units, studio cameras, and the like, are doing perhaps an even more spectacular job in turning their production and designing facilities to the service of the Nation at war. Some of them are turning out, in vastly increased quantities, their regular or similar products. Others have in addition taken over the development and manufacture of specialized items in more or less allied fields, but for wartime uses.

Perhaps the most spectacular and varied of these is the record chalked up by Bardwell & McAlister, the peace-time manufacturers of the "Keglights," "Dinky Inkies," and other lighting units so familiar in every studio. A comparatively new and highly progressive competitor in the studio lighting field before the war, this firm has expanded both its plant and its products until now it is turning out an amazing variety of vitally-needed wartime products. Months before Pearl Harbor, the already-expanding aircraft industry began to draw upon Bardwell-McAlister "know how" to speed and simplify the production of hard-to-shape sheet-metal subassemblies for Axis-blasting aircraft. Today, these products are streaming out in constantly heavier truck-loads to do their part on the fighting fronts. B and M ingenuity, too, had developed a radically different, quickly changeable pilot-light for instrument panels, which slashed the time for changing these tiny but necessary units from over an hour to a minute or less. Since then, the firm's specialized experience in designing and building lighting equipment has brought forth an amazing variety of specialized instrument and desk illuminants for planes which are in action on all our fighting fronts. Meantime, the production of studio-type lighting equipment for the Army, Navy, Air Force and Marine Corps training film studios has swelled to match the expanding needs of these Service cinematographic branches.

Small wonder it is, then, that only last month Bardwell & McAlister became the first Hollywood firm of those normally supplying the film industry to be awarded the coveted Army-Navy "E" for excellence in production.

Nearby, Mole-Richardson, Inc., the parents of today's Fresnel-lensed "inkies" and Technicolor arcs, have kept equally busy turning out not only their regular photographic lamps, but also special, highly secret portable searchlight and generator equipment for spotting enemy planes in the air wherever American troops are in action. They, too, have received high commendation from the high officials of our Services who have seen the performance of this equipment in the actual combat zones.

Most of Hollywood's studio cameras have come from the plant of the Mitchell Camera Corp. . . . but today, Mitchell cameras of all types are being turned out in greater quantity than was ever believed possible, for these units are anxiously awaited by Uncle Sam's military cameramen all over the world. Other devices—secret and very special—are being made, too, on a production scale even the most optimistic would have considered impossible for such precision equipment only a brief two or three years ago.

Bell & Howell's Hollywood plant, so long a service center for specialized equipment, and the starting-point for many a design for revolutionary studio and laboratory equipment, is today working at full pressure and on an expanding scale, producing and developing intensely specialized cinemachinery for the photographic sections of many of the nations now united to crush the Axis—and record it on film in the process.

Art Reeves is another of the suppliers of camera, laboratory and sound equipment who has found his regular products in heavier demand than ever before, as adjuncts to the varied uses being made today of military photography.

So, too, is Eric M. Berndt's "Auricon" 16mm. single- and double-system sound-recording equipment. It is hardly telling tales out of school to hint that one of our most distinguished actors—incidentally a 16mm. filmer of note and ability—is using this equipment to make special instructional films for the Air Force in overseas combat areas.

No listing of the War Effort contributions of Hollywood's cinetechnical firms and branches could be complete without mentioning the work being done by Emery Huse, A.S.C., and his staff in the Eastman Kodak West Coast Technical Department in the joint A.S.C.-Academy projects of training combat cameramen for the Signal Corps and Marine Corps, for it is under Huse's tutelage that these students get their grounding in the more theoretical side of photchemistry, sensitometry, optics, etc., before passing on to John Arnold and other A.S.C. members for their practical instruction in camera-handling. The total of these trainees is probably a military secret, but it is considerable, and the graduates are already distinguishing themselves on all our combat fronts, as well as in training film production.

In a brief summary like this, it is inevitable that some of the firms making distinguished contributions to the War Effort should be left out—in some cases deliberately, because of the confidential nature of their work. But all of them are responding vitally to the Nation's call of need, turning their specialized skills and their knowledge of how to solve intricate and often unconventional technical problems overnight to the benefit of their country. In fact, as one expert recently expressed it, "The normal demands of Hollywood's studios, who customarily expect the technically impossible to be served up in working order

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Aces of the Camera

XXX:

Virgil Miller, A, S. C.

By WALTER BLANCHARD

VERSATILITY is the word for Virgil E. Miller, A.S.C. He is versatile above average as a cinematographer, for in his twenty-seven year career as a cameraman he has proven his artistry and technical skill on upwards of 200 productions—super-specials and program-pictures alike—and he is equally at home working in black-and-white, Technicolor or professional 16mm. Kodachrome. But beyond this, he is also a capable executive (he has headed the Camera Departments of two major studios), a skilled electrical engineer, a capable writer of both prose and verse, and in his spare time talented artist with pencil and brush. He has, too, a notable string of cinetechnical "firsts" and a great deal of important cinematographic research to his credit.

Virge Miller, you see, didn't start out specifically to be a cameraman. He grew up as a farm boy in southern Illinois and, after completing high school, business college, and a year at a neighboring college, he decided he'd better work for a while to build up a war-chest to help take him through college. And for some reason he decided to come out to Southern California to do the working. His first job was with a crew running the first electric power-line between what are now Hollywood and Burbank; today it's a well-populated residential district, with several studios like Warner's, Universal and Walt Disney's "mouse-factory" strung along the route; but thirty-odd years ago it was a bare desert.

Electrical work fascinated young Miller so much that he decided to learn as much about it as he could. He learned quickly, too—so quickly that before long he found himself working as foreman of one of the crews, and gaining an excellent practical knowledge of electrical installation. And he decided that electrical engineering was the profession he wanted to learn.

So, when the bankroll was sufficiently built up, back he went to enroll in Kansas State College as a student in electrical engineering. His practical experience in electrical work helped him immeasurably in working his way through college, for after a short period of the usual working-through-school occupation of dishwashing, one of his professors recommended him for a post in the college's electrical maintenance department, and only a short time later, when the head of that department retired, he recommended young Miller over the heads of many senior students to be his successor. Thereafter Virge remained as college electrician until graduation, staying on in the summer-time not only to help his bankroll, but also to gain more experience. He re-wired most of the buildings on the campus, and ran laboratory and practical tests on electrical equipment for various of the State's departments. In his Senior year, he was called upon, too, to serve as an instructor in electricity for junior engineering students, and the following year, while he waited for the girl who is now Mrs. Miller to graduate, he served on the faculty as a full-fledged instructor.

After his wedding, he decided that California would be a good place for a young man to make his future and raise a family at the same time. He was right on both counts, for he quickly found an excellent position as resident engineer for one of California's first big power-plants, tucked away in the High Sierras beyond Bishop. Some months later he found, too, that the first of his five sons was on his way to join the family. And as an isolated power-plant high in the mountains isn't exactly the best place in the world for an expectant parent, Virge decided to move back to Los Angeles and civilized conveniences.

This move—though he didn't realize it at the time—marked the major turning-point in his life. Scouting around for jobs at which an aspiring young electrical engineer could be useful, he learned that the Universal Studio (then still in Hollywood) was looking for an electrical expert to install an electrical department. He went after the job—and got it. So, during 1913 and 1914, Virgil Miller installed and headed the first electrical department in any West Coast studio.

"That was a revolutionary departure for those days," he reminds you, "for the movie companies had come to California originally because of the sunshine . . . so that they could make pictures all year 'round without having to rely on the faint winter sunlight of the East, or on expensive artificial light for making pictures during the winter. Plenty of people laughed at Universal for putting in an electrical department—said it was like carrying coals to Newcastle to use lamps when you had the famous California sunshine to light your sets free. But one after the other, all the studios came to it, 'blacking out' the glassed-in stages they had originally used, and building new ones with opaque walls when new stages were needed. One or two of those old 'glass stages' still remain—as scene docks and prop-storage lofts—but the last one actually in Hollywood, at the old Fox Western Avenue Studio, was torn down only a few weeks ago. Maybe another link with the past is gone—but when you think of the tremendous strides cinematography has made since we first started using artificial light for our pictures, rather than half-controlled sunlight, you couldn't wish those 'good old days' back!"

After heading Universal's electrical department for two years, during which he participated in the planning and much of the installation for Universal's new ranch-studio, Universal City, which still houses today's Universal, Miller began to develop an interest in cameras and camerawork, and was in time transferred

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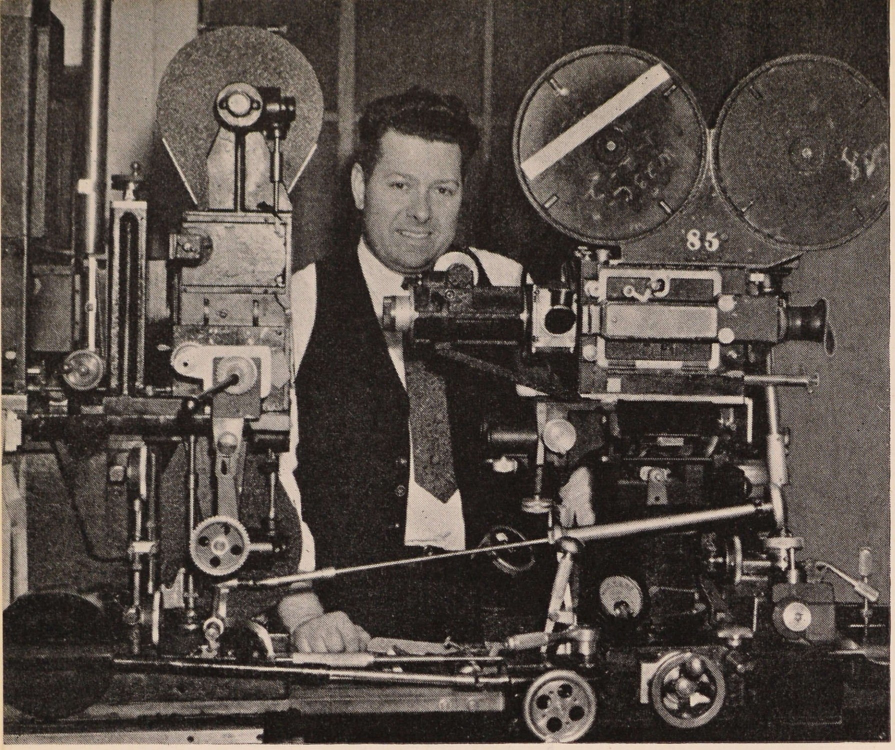

Unseen Camera-Aces

II:

Linwood Dunn, A. S. C.

By WALTER BLANCHARD

ONCE in a while, on the credit-titles of RKO productions, you may chance to see the line, "Optical Effects by Linwood Dunn, A.S.C." You only see that credit-line on rarely spectacular occasions, though, for Lin Dunn is an optical printer expert, and optical printing is one of the industry's prime "trade secrets." But Lin is not only one of the most valued members of Vern Walker's RKO Camera Effects Department, but indisputably one of the foremost, if not actually the foremost of optical printer virtuosos in the industry.

Many people, even within the industry, haven't a very clear idea of what an optical printer really is, except that it seems to be a photographic magician's hat out of which a skilled specialist can pull almost any variety of photographic miracle. But as Lin explains it, an optical printer—or at least its basic principle—is simple enough: it's a device in which a camera-head is precisely aligned with a lenseless projector-head which, equipped with a pilot-pin movement, moves a developed film past a diffused light-source so that the film in the camera-head records that image frame by frame as the two movements work in synchronism. That's the basic idea—but you can dress it up with all sorts of gadgets for producing special effects; you can gear the two movements so that they operate at different frame-frequencies, enabling you to print only every second, third, or fourth frame, or to print a single frame on an indefinite footage in the camera-head. You can print the action of the film in the printer side either forward or backward. You can alter the separation of the two heads during a shot, or use a "zoom" lens, and make a stationary-camera shot into a dolly-shot (or vice-versa). You can add mechanical and optical gadgets which permit an almost endless variety of wipes, fades, melts and tricky transitions and superimpositions. And when you begin to ask an optical printer to do these tricks you find yourself in need of an optical specialist like Lin Dunn.

Strangely enough, in view of the intensely technical work which he is now doing, Lin didn't, at the outset, care for technical studies. In fact, during his school years in Brooklyn, he tried to avoid them as much as possible, preferring to study music. He's still an accomplished musician, playing the saxophone, clarinet, violin and a variety of other instruments, and for a long time retained his membership in the Musicians' Union which, in earlier days when camerawork hit slack periods and he needed something to keep the wolf away from his door, proved a very practical bit of sentiment.

"I became interested in motion pictures," he says, "because my uncle, Spencer Bennet, was a director on Pathé serials. But as there was no opening just then with the Pathé Serial Unit, I worked for two years as a projectionist in the non-theatrical field for the American Motion Picture Corp.

"When I finally got a chance with my uncle's unit, I began as an Assistant Cameraman, and worked my way slowly up to Second Cameraman and finally to First Cameraman. And when my 'break' as a First Cinematographer finally came, it forced me to make a heart-wrenching decision. I'd wanted that chance for years. I had also wanted a chance to make a trip around the world. And both opportunities were presented at the same time—the latter, as musical director on one of the Dollar Line's globe-girdling cruisers.

"That was a tough choice to make—but I chose camerawork, and I'm not sorry I did. By a strange coincidence, I started my first picture as a full-fledged First Cinematographer, not only on the same day the ship sailed, but on location less than two blocks from the pier!

"Getting back to pictures, I've always felt that the training I received making those serials was invaluable to me, for serials cover almost every variety of cinematography, and under all sorts of conditions, both good and bad. Serials—even more than comedies, I think—give a cameraman an all-round practical training that can only be compared to theatrical stock company work for an actor. After you've put in a few years photographing serials, you feel as though you could tackle anything."

This confidence was tested when finally the Pathé Serial Unit was disbanded. Lin spent some time free-lancing in both the major studios and the independent or "quickie" field. Finally he joined RKO in 1929, when the studio's trick department was just being established . . . and got his first look at an optical printer. Since then, he has done almost every type of trick and special-process photography, but he likes optical printing the best, for he feels that good optical printing is one of the mainstays of any well-organized trick department.

Modern special-effects camerawork, as he points out, embraces a remarkably wide variety of specialized processes and operations. In some studios, the staff working with each of these processes forms a more or less separate department; in others, as with Vern Walker's department at RKO, the specialists handling matte shots, miniatures, background-projection "process-shots," optical printing, and sometimes titles and in-

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THROUGH the EDITOR'S FINDER

A MONTH ago in this space we unburdened ourselves of a few remarks about the need for greater standardization of studio camera equipment and accessories. That this need is not confined wholly to 35mm. professional cinemachinery is indicated by a letter we received soon after, from the president of one of the most progressive amateur cinema clubs in the east-coast region. Said he, "Your plea for standardization of studio equipment hit home here with the amateurs as well. As you know, the same deviation in regard to lens-mounts, etc., exists to an even greater extent in amateur equipment. I can name at least two major manufacturers who put out products in which essential units which should and could be standardized are not interchangeable between different models of the same make and size of equipment. For example, two different cameras of the same make and size—either both 16mm., or both 8mm.—are fitted with lens-mounts which are not interchangeable. Even the frame-lines of some of the identical models of a product will not match up, nor can you be sure your film will be aligned the same way in two otherwise identical projectors of the same make. Of course, as you say, there's nothing much that we can do about it now; but after the war, if something could be pushed through along these lines to make some of the manufacturers see the light, the amateurs of this country would sure appreciate it!"

This need for greater standardization in the substandard field extends with equal importance to the 16mm. professional field. True, we have well-established dimensional standards for film, perforations, frame-sizes and soundtracks for 16mm. (we have all except the latter for 8mm., too) but these standards are not always adhered to, and some others, badly needed, don't even exist. For example, in starting a professional 16mm. production, the first thing any experienced 16mm. cameraman or producer considers is, if more than a single camera is to be used, will the scenes shot with all the cameras (or magazines) used frame up identically. Interchangeability of lens-mounts, sound drives, etc. —or the lack of it—is another problem. And the lack of uniformity between 16mm. sound projectors is a perpetual hazard to the producers, recorders and sponsors of professional 16mm. films; even if a picture sounds perfect on the producer's or sponsor's own machines, there is no guarantee that it will sound that well—or even sound acceptable—on machines in the field, even of the same make.

There seems little doubt that substandard cinematography—both 16mm. and 8mm., and professional and amateur—will experience after the war an even greater boom than followed the introduction of 8mm. and the "candid camera craze" of some seven or eight years ago. Today, our makers of cinemachinery, while they are of course immediately busy with war production, are unquestionably giving thought to vastly improved post-war equipment. And while they are now mentally or otherwise "tooling up" for post-war production, let us hope that they are also giving due thought to increasing the standardization and interchangeability—on an industry-wide scale—of these basic elements and accessories of their products. We would not by any means have all substandard cameras, lenses and projectors identical in all features and performance: but the assurance that any 16mm.-mounted lens would fit on any 16mm. camera, or any 8mm.-mounted lens on any 8mm. camera. and that film shot in a camera of any given type would align with film shot in any other camera, and on any projector, would immeasurably advance substandard cinematography, whether as a hobby or as a profession.

•

WE wish somebody would explain to us the logic of the way some studios too often preview their pictures. They spend hundreds of thousands—sometimes millions—of dollars in making a production. They spend a great part of this in glamorous acting personalities, and in scripts, direction and acting which combine to produce definite dramatic moods. They spend many thousands of dollars and great care picking a director of photography whose work they know will set off these players to the best advantage, and aid most powerfully in establishing and building by visual means the emotional responses they want from their audiences.

Then they show the picture to the press—in the form, all too often, of a work-print which is scratched and dirty, perhaps with the fades and other transitions or effects not yet cut into place. Or they show what seems like a first composite print, in which scene densities are not yet balanced as perfectly as they will be in the release-print, and often with the 1000-foot reel-units temporarily spliced to the 2000-foot projection reels with embarrassingly obvious tape splices. Sometimes they may show a print made for low-intensity projection on a high-intensity projector, or one made for high-intensity projection on a low-intensity machine.

And they expect the press, very few of whom are capable of making allowance for these technicalities, and the improvements that can be expected when a properly-balanced print is shown under normal projection conditions, to judge the picture by what they see on the screen under these generally unrecognized handicaps!

Of course, from the producer's viewpoint it does not matter too greatly if those reviewers who do comment on photography give the cameraman an unfavorable review when they see a picture under these unfavorable conditions. But it should matter very much to the producer if for this reason, which is entirely within his control, the critics say that his star does not look well, or that somehow his picture failed to evoke the emotional response it ought to. Bad prints, with or without bad projection, can produce just such comments. No producer today would gamble on previewing a 1943 production on a 1923 DeForest Phonofilm sound-film projector. Previewing unbalanced work-prints or first prints, or using ill-matched print and projection illumination is just as hazarduous a gamble. So why do it — — ?

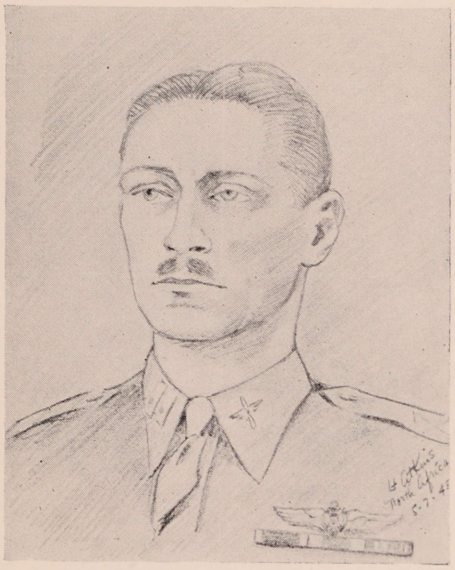
•

PERHAPS blowing one's own horn isn't exactly the best of taste, but we can't help expressing a glow of satisfaction over the evidence we have that THE AMERICAN CINEMATOGRAPHER is without doubt one of the most extensively read and quoted cinetechnical journals in the world. Some months ago, we were informed that this was one of the "learned journals" selected by the U. S. State Department for microfilm transmission to China, and we are constantly surprised—and pleased—when we find that official cinetechnical visitors from distant lands like Russia, Britain, Australia, China, India and Latin-America are as familiar with our magazine and its staff as though they lived across the street from us here in Hollywood.

We were flattered, too, when within a very few days' time recently the postman brought us cine- and phototechnical journals from points as far separated as Australia and England in which articles from THE AMERICAN CINEMATOGRAPHER were reproduced in whole or in part, while permission to reproduce another article dealing with 16mm. sound projection was sought almost simultaneously by a national magazine for professional projectionists, and by the visual-education departments of two of our foremost universities, while letters from officers in charge of training-film work among our Armed Services told us of many articles designated as "required reading" for the men in their commands. We cannot overlook, either, that one manufacturer of a rather expensive professional instrument, who since he started business nearly two years ago has advertised *only* in this magazine, has sold hundreds of these costly instruments not only in this country but in Latin America, England, South Africa and also so extensively among the photographic sections of our Armed Services that he can now accept virtually no civilian orders.

All this is recognition . . . but it is also irrefutable evidence of a responsibility we do not take lightly. And despite all the difficulties of getting out a technical magazine in times like these, we will strive to continue to bring the best of cinetechnical information to the world-wide circle of readers who have so flatteringly expressed their appreciation of our efforts in their behalf.

A.S.C. on Parade



Hats off again to our favorite Swede, **Air Force Capt. Ray Fernstrom, A.S.C.** Last month we printed his letters telling how he was wounded in action over the German lines. This month, word comes officially that he has become the first A.S.C.-member to be decorated. On May 26th, in the African base hospital where **Ray** is recuperating from his wound, Major General Lewis H. Brereton, U. S. Middle East Commander, pinned not only the Purple Heart Medal, but also the Air Medal with bronze Oak Leaf Cluster, indicative of a second Air Medal award, on **Ray's** tunic. The sketch of **Capt. Fernstrom** above was made by Lt. Atkins, of the Air Force, and sent to us with a cheery note from **Ray,** from the American hospital from which we hope he is now discharged as cured. Nice going, **Ray,** we're proud of you!

★

Congratulations to Navy Lieutenants **Joe August, A.S.C., Harry Davis, A.S.C., Al Gilks, A.S.C., Sol Halprin, A.S.C., Al Siegler, A.S.C., Gregg Toland, A.S.C.,** and **Harold Wenstrom, A.S.C.,** on receiving well-earned promotions to the rank of Lieutenant Commander. Most of them have been on active duty since months before Pearl Harbor, and doing exceptional—if unpublicized—work all over the world. We're proud to learn they're now "two-and-a-half-stripers."

★

We're sorry to report that **Charles Rosher, A.S.C.,** has been absent from his usual haunts out MGM way, due to serious illness, but the latest bulletin is that he's getting better fast. **Ray June, A.S.C.,** is also reported as improving, but not yet able to receive visitors. We wish both of them a speedy recovery.

★

When things happen to **Bob Burks, A.S.C.,** they don't happen singly: assigned to direct the photography of Warners' "In Our Time," his first venture into "production" cinematography after long experience with special-process work. About the same time he became a papa—also, we believe, his first; and to cap the climax, a slip on the set landed him in the hospital with a broken leg. As we go to press, report is that he is recovering as comfortably as possible, with a big cast on his injured leg . . . well, we'd rather have a cast on our leg than some casts we've known on our hands!

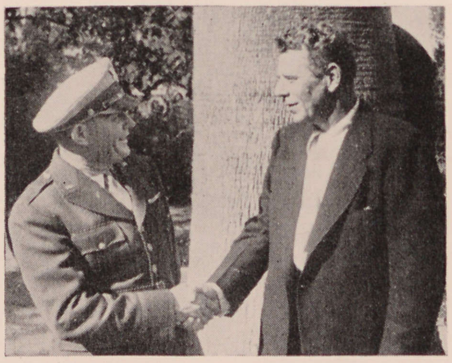
★

A note from **Capt. Osmond Borradaile, A.S.C.,** up in Canada recuperating from injuries received in North Africa, asks us please to correct the statement made some time back, that he was decorated for his achievements. 'T'ain't so, he says, though the brass hats did pat him soundly on the back for what he did in Abyssinia and North Africa.

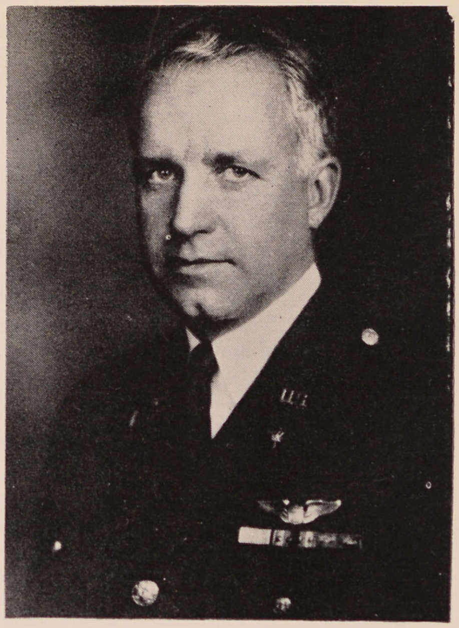
★

The other day we had a surprise visit from **Reggie Lyons,** one of the earliest members of the A.S.C. He is now working as a civilian cinematographer with the Signal Corps Training Film Lab. at Wright Field, Ohio—or rather working out of there, for he tells us that within the past few months he's been on 18 locations all the way from Brooklyn to California, shooting training films for the Army Air Force. He promises an article on training film production as soon as he gets time to write it.

★



An unexpected visitor from out-of-town this month was genial **Len H. Roos, A.S.C., F.R.P.S.,** who represents the Newsreel Pool in the Hawaiian area. On a quick trip to see his bosses in New York (and maybe to tell them more about his hush-hush experience 'covering' Pearl Harbor that memorable Dec. 7th) we were lucky enough to grab the above shot of **War-Correspondent Len** being welcomed home the camera-shy by **A.S.C.-Prexy Len Smith** . . . we don't intend to be corny, but we're tempted to caption the pic "Two swell Lens-ers." Ouch! We'll be good!



Congratulations to **Associate Member E. P. "Ted" Curtis, A.S.C.** For the past several months he's been doing a whale of a job on General Spaatz' Air Force staff in North Africa, and now word comes from Washington that he has been promoted to Brigadier General. 'Way back in 1940 **Ted** took leave of his job as head of Eastman's Motion Picture Film Sales Dept., and went on active duty as an Air Force Major—the same rank he held at the end of World War I, from which he came home as one of America's leading "aces" and a Squadron Commander, as well. His climb from that rank to Brigadier General is something anyone who ever knew the genial, efficient **General Curtis** could have easily foretold, one in which all his friends can take sincere pride.

★

Thanks to **Russell Harlan, A.S.C.,** for inviting us to bring our ten-year-old son to visit his set . . . and a double portion for the fine way he and the whole "Gun Master" troupe went out of their way to give a youngster the thrill of his life.

★

Merritt B. Gerstad, A.S.C., draws a nice assignment at Warners', filming "Conflict."

★

Nice to see **Norbert Brodine, A.S.C.,** coming to roost at 20th-Fox, directing the photography of "Dancing Masters," with Laurel and Hardy.

★

Monogram briefs: **Marcel Le Picard, A.S.C.,** finishes "Outlaws of Stampede Pass," while **Jackson Rose, A.S.C.,** starts "I Was a Criminal."

★

And **Ira ("Joe") Morgan, A.S.C.,** is busy making "Tiger Fangs" for PRC.

★

At Paramount, **Charles Lang, A.S.C.,** starts "Standing Room Only;" **Victor Milner, A.S.C.,** gets rolling on De Mille's "The Story of Dr. Wassell;" and **Theo-**

(Continued on Page 268)

PHOTOGRAPHY OF THE MONTH

CRASH DIVE

20th Century-Fox Production (Technicolor).

Director of Photography: **Leon Shamroy, A.S.C.**

The first few reels of this picture are Technicolored in adequate but thoroughly routine fashion. But thereafter—from the time the submarine first submerges and the dramatic effect-lightings begin—one can see why Leon Shamroy, A.S.C., was the first "production" cinematographer to capture an Academy Color Award single-handed. Without the visual drama his camera and lightings—especially the undersea ones making vivid dramatic use of projected color—give to the production, "Crash Dive" would probably be considered pretty banal entertainment. But because of what Shamroy's artistry does in creating emotional responses, not only in the heavily dramatic moments, but in the love-scenes (particularly some of the night-effects in the car and outside the girls' school), the picture takes on a dramatic stature it would not otherwise have enjoyed.

Some of the special-effects work—notably the explosions in the Nazi U-boat base—is excellent; but much of the rest is decidedly mediocre. The process backgrounds, especially, we considered poor. In many of them was noticeable a pronounced "hot spot" which with today's technique shouldn't be there. In others, the background plates were unduly grainy, and looked as though they had either been photographed in very indifferent monopack, or unnecessarily printed down. But for all that, "Crash Dive" is worth seeing if you want to see what a fine cinematographer can do to make—in the dramatic sense—a picture.

BACKGROUND TO DANGER

Warner Bros. Production.

Director of Photography: **Tony Gaudio, A.S.C.**

Special-effects by **Warren Lynch, A.S.C.,** and **Willard Van Enger, A.S.C.**

This mystery-melodrama takes rank very close indeed to "Casablanca" as one of the season's most spectacularly pictorial jobs of black-and-white cinematography. Laid against a rather similar background, giving ample opportunity for pictorial effect-lightings, "Background to Danger" suffers, in our opinion, from direction inclined too much toward action and too little toward cooperation with the cameraman, and from sets less photogenic than those of its predecessor.

But within these limitations, director of photography Tony Gaudio, A.S.C., has done a magnificent job. Where conditions permit, his pictorial compositions are delightful, and his effect-lightings something that make you want to see the picture again. His treatment of his players is, as usual, first-rate, regardless of the handicaps we feel he must sometimes have been working under.

The special-effects work by Warren Lynch, A.S.C., and Willard Van Enger, A.S.C., is another outstanding part of the production. A great deal of it is wholly unrecognizable as special-effects camerawork, and all of it is handled in an unusually capable manner. We can't help wishing, though, that a bit of optical printing had been done on one of the railroad scenes to smudge out a name painted boldly across an engine drawing a train out of a station, and which made it painfully obvious that the scene had been shot at Victoria Station, London, rather than in Ankara!

CONEY ISLAND

20th Century-Fox Production (Technicolor).

Director of Photography: **Ernest Palmer, A.S.C.**

Here's another of those delightfully-Technicolored 20th Century-Fox musicals. And, with the exception of the first couple of reels where, at least in the print we saw, the contrast seemed abnormally high, Ernest Palmer's camerawork makes the picture doubly a delight. The further the picture progresses, the more delightful become his camerawork and lightings. Art-directors Richard Day and Joseph Wright have, as usual, given him almost perfect sets to photograph, and the costuming completes a picture, which needs only the inspired camera-artistry of a man like Palmer to make a perfect gem of frothy Technicolor pictorialism. If by any chance you don't want to see "Coney Island" a second time to enjoy again its breezy entertainment and music (not to mention the excellently-Technicolored Betty Grable), you'll want to see it once more just for the pleasure of enjoying its photographic beauty and the almost flawless combination of color-design and camerawork.

BATAAN

Metro-Goldwyn-Mayer Production.

Director of Photography: **Sidney Wagner, A.S.C.**

In "Bataan," Sid Wagner, A.S.C., offers not only the finest photographic achievement from his camera in many a long moon, but what we'd like to predict as a strong candidate for Academy Award honors. You may or may not care for its theme of heavy war drama of an heroic rear-guard action on Bataan, but if you care at all for great cinematography, you'll want to see "Bataan" more than once.

Both story, action, and locale call for a very difficult combination of realism, effect-lighting and photographic mood treatment. Wagner provides this visual setting magnificently, in a way that enhances the dramatic values of the production enormously. We might say that to our mind some of the extreme night-effect scenes should better have been printed down a bit to give a visually and dramatically better impression of nocturnal menace, though this may have been merely the result of high-intensity projection on a comparatively small screen. But "Bataan" is full of visual impressions which will constantly repeat themselves in your memory once you've seen the film. We won't say which they are, for tastes differ: but there are enough of them to suit every taste, and to make "Bataan" one of the year's most spectacular photographic achievements.

The special-effects, especially the miniatures, which we assume to be the uncredited work of Maximilian Fabian, A.S.C., are another notable part of the production, as is Bronislau Kaper's superb musical score, to our mind quite the best of the year.

THE KANSAN

Harry Sherman Production, United Artists' Release.

Director of Photography: **Russell Harlan, A.S.C.**

You can't dismiss this well-budgeted "Western" with the remark that it is a collection of Russell Harlan exteriors, and that Russ is "tops" in this type of camerawork. That's true enough, but in "The Kansan," Harlan has plenty of interiors which he handles so excellently as to disprove for all time any thought that he is strictly a "Western" specialist. This reviewer is admittedly partial to smoothly-photographed exteriors (which, incidentally, Russ has provided in so far as fluctuating weather conditions on location permitted), but some of his favorite scenes were among the interiors, especially some of the effect-lighted scenes in the saloon.

Harlan's treatment of the players was exceptional, too, especially in the case of Richard Dix, who, despite all the years he has spent in pictures, Harlan's camera makes an actually believable romantic lead, though his appearance would have been still better with a slightly thinner application of the make-up artist's cosmetic retouching. We'd like, by the way, to see some producer give Victor Jory a part in which a cameraman could give him extreme dramatic lightings—something, perhaps, like those Pev Marley, A.S.C., used on Charles Laughton in "Les Miserables" . . . anyway, some which would take better photo-dramatic advantage of his mobile features than we've ever seen done.

DIXIE

Paramount Production (Technicolor).

Director of Photography: **Lt. William C. Mellor, A.S.C.**

This production—the last one Billy

(Continued on Page 268)

16mm. Movies For Our Soldiers

By LA NELLE FOSHOLDT

Long Beach Cinema Club

WE'VE bounced around in everything from an Army Jeep to a two-ton searchlight truck since we started showing movies to the Army Camps—and we love it. If you want to have the time of your life and be doing something the boys in the service really appreciate, start showing them movies, as we are doing.

A few months ago, when civilians were being urged to help entertain the soldiers, the Long Beach Cinema Club volunteered their services through the Recreation Division of the Long Beach Council of Defense, which is the coordinating agency for military and civilian recreation efforts in this area. Midge Caldwell was appointed chairman of a volunteer group to show 16mm. films as entertainment to the boys in camps stationed near us.

The first night we went out, we wondered just what type of films the boys would enjoy most, so we took along an assortment to find out their reactions. They sent an Army truck for us and we were soon rambling along feeling rather proud as we noticed the envious looks from pedestrians on the street. It took us about twenty-five minutes to get there, and going over a few rough places we wondered what condition our fellow projectionist would be in, for he was riding in the back with the equipment—and really bouncing around.

We arrived at the Mess Hall in time to see the cook slicing thick steaks, bacon and pork chops. For a minute we feasted our eyes and wished we were in the Army as the meat shortage was very bad at that time. While we set up the screen near the officers' entrance, the boys came in the back door by groups anxiously asking, "You aren't going to show us training films are you?" We gave them a list of the pictures we had and they began to pick them out in the order they wanted to see them.

They selected a 400-ft. sound comedy first, "Run Sheep Run," then a silent amateur picture, "Father's Time," by Ray Fosholdt, a club production, "Fire from the Skies," followed by two fast-moving professional shorts, "Here Comes the Circus" and "Ice Follies." The boys enjoyed the pictures so much we decided to line up members of our group to make a trip each Friday evening.

The following week, we found out they were very much interested in the latest sound newsreels. We had hesitated about taking any of these films along thinking that with war continually on their minds they would enjoy films on other subjects. That evening, the show consisted of "Coral Sea," a newsreel in sound, and two highly entertaining sport sound pictures, "Ride 'em Cowboy," and "Sport Spellbinders." Clarence Aldrich's amateur production "Ranch Romance" and "Bathing Beauty Parade," finished up the evening. The Bathing Beauty Parade really "went over" with whistling, clapping of hands and stamping of feet to give emphasis to their favorites. They were elated to learn the Parade was staged each year and their hopes really fell when we said it had been discontinued "for the duration." We went out in one of their largest trucks which had running-boards a good ways from the ground. When it came time to go home, Midge and I hesitated a moment trying to decide the best way to reach that high running-board gracefully with an audience looking on. They suddenly decided to send us back in a reconnaissance car which was much easier to get into! We stopped in our tracks as a voice boomed through the darkness, "Halt! Who goes there?" The Sergeant said, "Come on, that's just a sentry over on the landing field. He wants to make sure he's heard before he starts shooting!"

Above: Members of the Long Beach Cinema Club put on a 16mm. show for soldiers at an isolated gun-battery, with the mess-hall for a theatre. Below: making a 16mm. sound-film (note blimped Cine-Special and Auricon) of a show put on by soldiers at another battery. Photos by Clifford Lothrop.

The next Friday night, Pat and Nora Rafferty went along with Midge. I called afterwards to see how everything went. A Sergeant picked them up in a Captain's jeep and going up-hill, Nora became doubtful if they would make it. The Sergeant soon assured her the jeep could go through sand, mud, or up the side of a building.

The pictures were shown in the bar-

(Continued on Page 274)

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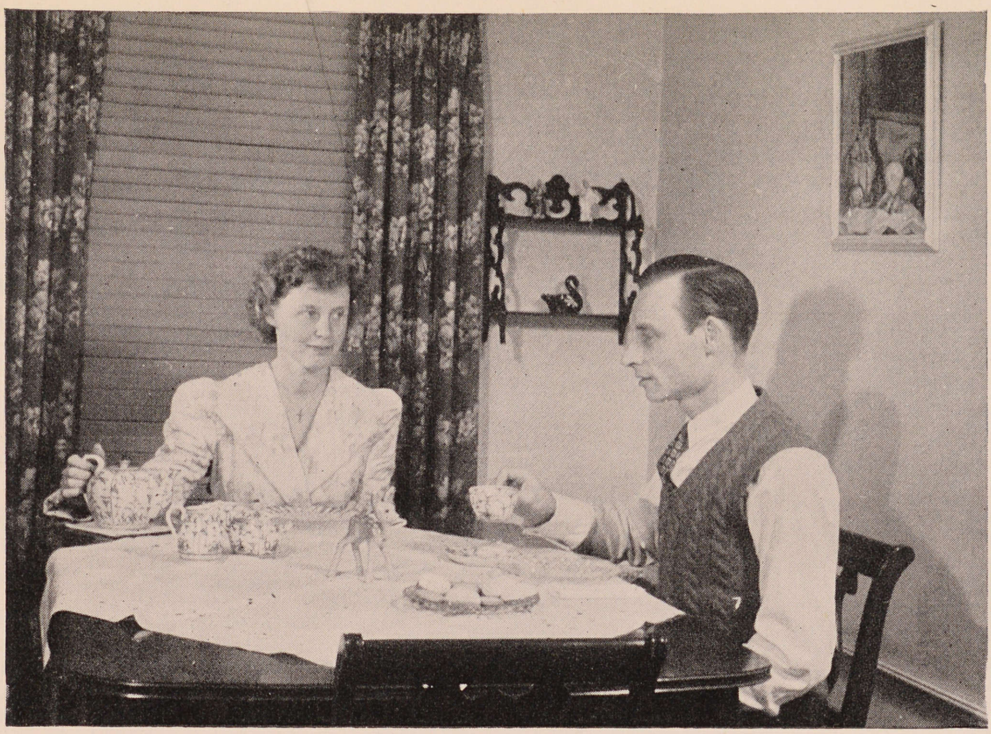
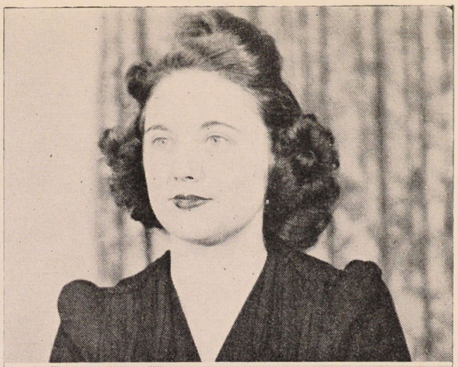
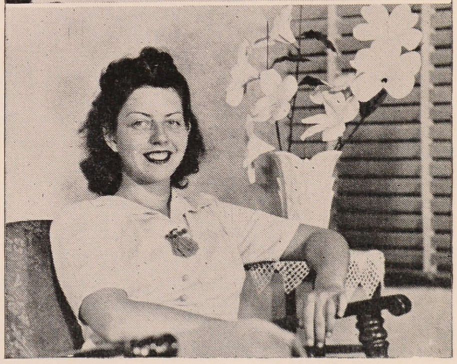
* The Long Beach Cinema Club was one of the first American amateur movie groups to volunteer to put its members and projectors to use in entertaining servicemen, and with the project under the guidance of Vice-President Mildred Caldwell, it is well in the lead as one of the most active in this worthwhile work, though other clubs, including the Syracuse Movie Makers' Association, the Metropolitan Motion Picture Club of New York, and others, including the Australian Amateur Cine Society of Sydney, Australia, have also gone actively to work bringing film entertainment to servicemen. We hope that this account of the Long Beach group's activities will inspire other clubs and individuals to follow along the same path.—The Editor.







"PROPS" - - - THE SECRET OF REALLY NATURAL HOME MOVIES

By JAMES R. OSWALD

IN the midst of a very gala occasion, which was literally a moviemaker's paradise, I chanced to overhear someone make an impertinent comment concerning the many cine fans present at this affair. The remark implied that it was pointless and showed lack of judgment to ever "waste" valuable film on unfamiliar objects and places, seemingly of little interest, and on "unimportant" persons who were total strangers, even to the photographer. Since footage was being shot at a rapid rate with cameras grinding all around me, it became still more obvious that the implication was uncalled-for and without foundation. Likewise it became apparent that the person making it had little knowledge of, or interest in, photography, either still or motion picture. Little did this individual know or understand what really constitutes a good picture. Little did he realize that these insignificant objects, yes and human beings too, were merely *part* of the picture, and a very small part at that. And that they were actually nothing more than "accessories," carefully chosen by the cameraman, to make a worthwhile scene out of an ordinary, commonplace setting.

The advanced amateur knows only too well the tendency people have to "freeze up" and become stiff the moment the cine camera is pointed their way. Folks, who might otherwise be the life of the party, immediately become self-conscious when requested to act in a movie scene. It's indeed surprising how they suddenly can't find a thing to do while in front of the buzzing camera. Such scenes usually create quite a laugh from future audiences, but they don't show the subject as he or she really is, and they certainly should not be classed as *good* movies.

Everyone knows the value of a natural, seemingly unposed scene of a person as he really is in everyday life. People also have the ability to recognize good composition when they see it, whether they can define the word or not. How, then, can we attain this naturalness so desirable both in human subjects and in material subjects, such as backgrounds, etc.? The answer is quite simple. Every little detail within the camera field should be closely watched. These minor incidentals, some placed in the hands of the actors, others merely a part of the picture, will dress up the scene in general, making the result more attractive. The minor incidentals which I refer to as accessories, are professionally known as "photographic props."

Props are little more than common, everyday objects which are included in the picture area to enhance its value. If properly used they may not even be noticed by the casual observer, but their absence would have a decided weakening effect, noticeable to anyone. On the other hand, if they are not used to best advantage, the resulting picture may be worse than one had they been omitted entirely. A little common-sense before shooting will do much toward the skillful, harmonious arrangement of seemingly insignificant details. Any time spent in preparation of this sort

Above, left: Note naturalness given this scene by tea-set "props" which give the actors something to do. Right, top: Without props, the girl is still and self-conscious; beneath, given a letter to write, she relaxes and is natural. Middle: A simple drink of "coke" makes this scene more natural, though bottle in foreground should be removed, as it distracts attention from main action. Bottom: A $1 Venetian blind on a bare wall, plus a vase on a stand, make this shot more natural. A darker vase would be better, however, as it wouldn't stand out so prominently. Photos above by James R. Oswald; at left, by Wm. Stull, A.S.C.

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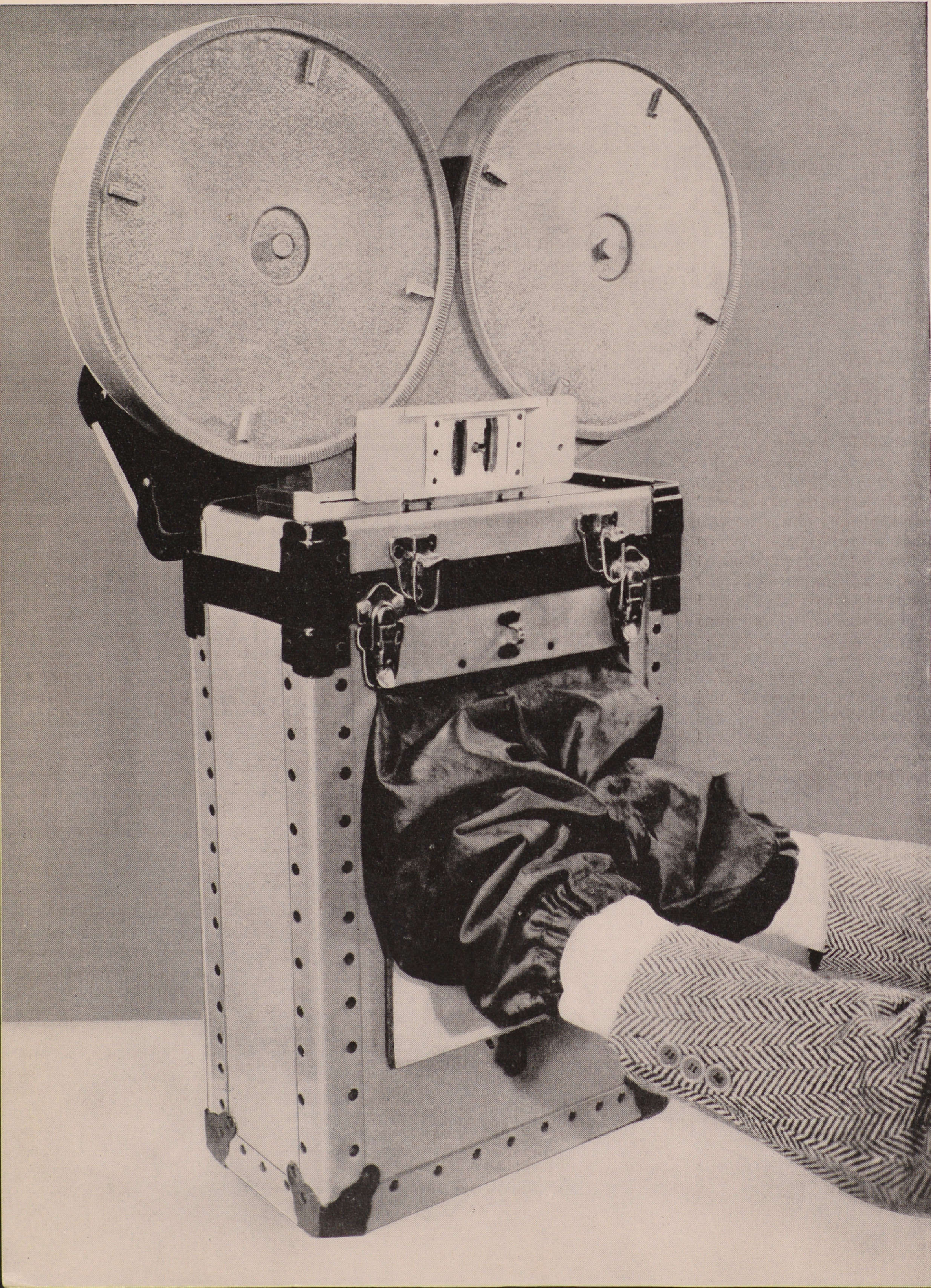
CAMERA EQUIPMENT COMPANY ANN

"PROFESSIONAL JUNIO

TRIPOD WITH REMOVABLE HEAD AND "H



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The friction type head gives super-smooth pan a and 80° tilt. A generous sized pin and innior service. "Spread-leg" design affords utmost gidity adjustments. A "T" level is built into this s erfine be set for 16mm E.K. Cine Special, with without B & H Eyemo (with motor), and with or with ut alig head is unconditionally guaranteed 5 years. ore d Junior"* Tripod With Removable Head is conta be sent upon request.

Field Devel p

★ The kit serves as a portable darkroom f deve motion picture film in the field or on locati The ft. and 1000 ft. Mitchell, Bell & Howell nd V adaptor is available for Cineflex magazine The with three special size thermos bottles for velop complete descriptive data will be sent upo requ

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NIOR"★

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ead "Professional Junior"* Tripod

eat e adds great flexibility to the versatile t is ow possible to easily remove the friction ba by simply unscrewing a finger-grip head can hen be mounted on a "Hi-Hat" low-base

upe smooth pan and tilt action,—360° pan d and trunnion assures long, dependable ord utmost rigidity and quick, positive height t in this superfine tripod. The top-plate can cial with or without motor; 35mm DeVry and wit or without alignment gauge. The tripod ed years. More data about the "Professional ble lead is contained in literature that will

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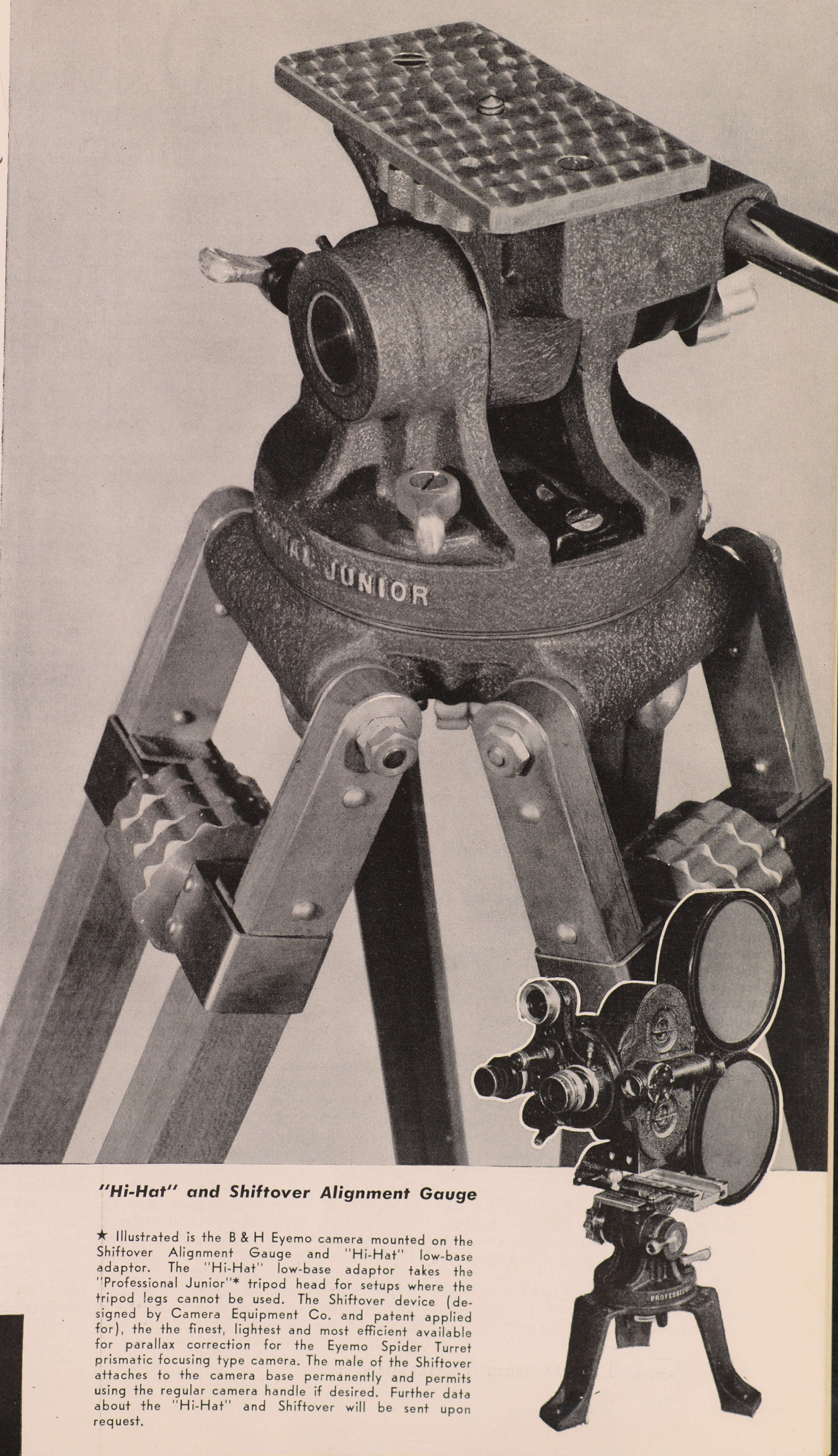
veloping Kit

dai oom for developing hand tests of 35mm r c location. The kit is equipped to take 400 & Howell and Wall magazines. A special gazines. The developing kit is furnished ot es for developer, hypo and water. More e nt upon request.

veloping Kits, "Hi-Hats" and Shiftover Alignment ui ent Co. are used by the U. S. Navy, Army Air ategic Services and other Government Agencies— ee companies and 16mm and 35 mm motion picture



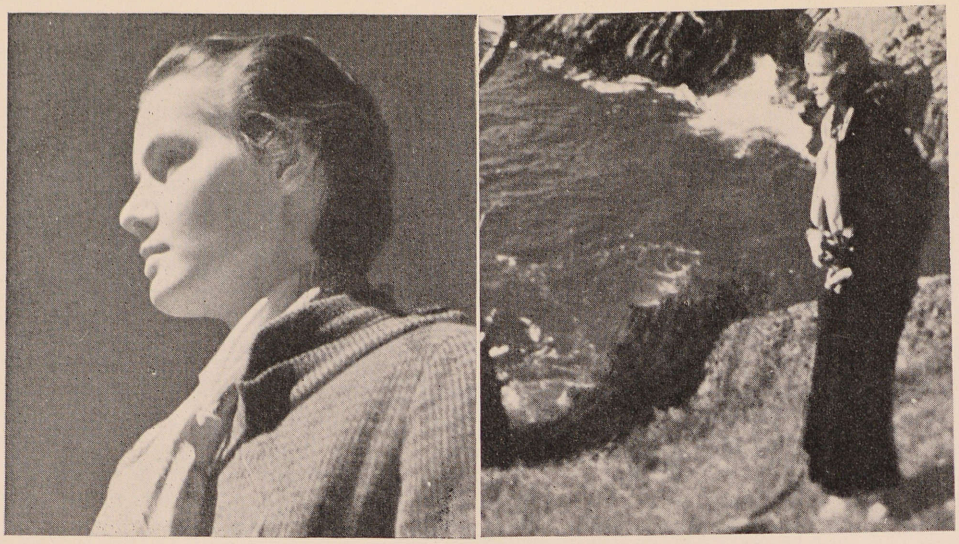
"Hi-Hat" and Shiftover Alignment Gauge

★ Illustrated is the B & H Eyemo camera mounted on the Shiftover Alignment Gauge and "Hi-Hat" low-base adaptor. The "Hi-Hat" low-base adaptor takes the "Professional Junior"* tripod head for setups where the tripod legs cannot be used. The Shiftover device (designed by Camera Equipment Co. and patent applied for), the the finest, lightest and most efficient available for parallax correction for the Eyemo Spider Turret prismatic focusing type camera. The male of the Shiftover attaches to the camera base permanently and permits using the regular camera handle if desired. Further data about the "Hi-Hat" and Shiftover will be sent upon request.

RANK C. ZUCKER

EQUIPMENT CO.

NEW YORK CITY



A familiar—and instructive—mistake: The long-shot was filmed unfiltered, while the filter used on the close-up to darken the sky made the red dress several shades lighter, and "washed out" the face-tones.

Do Your Mistakes Teach You What Not To Do-?

By PHIL TANNURA, A. S. C.

There's a story told about a prize-fighter who once walked squarely into Joe Louis' Sunday punch . . . and when, considerably later, the birdies stopped singing, remarked philosophically, "Well, at least that taught me what *not* to do!"

This may seem like a rather negative way of accumulating knowledge, but it is undeniably effective. Besides, there are always two aspects of learning how to do anything: what *to* do, and what *not* to do. Of the two, I think the "nots" are often the more important, and the harder to learn, probably because they're mistakes most of us want to bury in quick oblivion. But if we dig them out and study them they can often be every bit as instructive as our most cherished successes.

Take those mistakes we've all made in moviemaking, for example. Whether we shoot for pay or pleasure, we don't, as a rule, care to screen past mistakes very often. But now that film is scarce, every one of them can—or should—carry a lesson of something we want to avoid in the future, to avoid wasting precious film. So before you do any more shooting, why not dig out all of your "horrible examples" you can lay hands on, and spend a quiet evening with your projector, studying and analyzing the things you *shouldn't* do?

And while you're digging that film out, let's go over a few of the more familiar things you shouldn't have done (but did) and suggest a few simple remedies for them.

First on almost anybody's list of home movie "should nots" is over-fast panning. Most experienced amateurs will probably chime in at this point that they learned all about that long ago—and learned that the simplest and safest cure was simply not to pan. That's all right as far as it goes: but even if (unlike the unlucky professional) you don't have a pan-mad director working with you and insisting on moving the camera all over the room or landscape, you'll still find occasions when you've just got to pan.

In a case like that, your first remedy is to set the tension on your tripod's pan-head tight enough so it offers enough resistance to hold you down to a decently slow pan . . . and then remember to pan even slower than that. But this remedy isn't very much help when, through necessity or very questionable choice, you may have to make the shot with the camera hand-held. In that case, you'll find it a good idea to speed the camera up enough so it will automatically slow the pan for you. If you're shooting for silent, 16-frame-per-second projection, speed the camera up to 24-frame speed; if you're shooting for 24-frame sound-speed projection, whack it up to 32 frames per second. Sure—that uses more film: but no more than you'd use if you panned at the properly slow rate. And it will slow and smooth your pan like magic.

Another thing to remember is to have a legitimate reason behind your pan. As a rule, there are only two real reasons for panning. First, to follow some moving object. Second, to show some panorama which simply cannot be shown, or at least cannot be shown effectively, in a single, stationary-camera shot or a series of such shots.

In the first instance, you simply follow your moving object as smoothly as you can, keeping it constantly centered in your finder so it won't weave back and forth on the screen.

In the second instance, you'd better remember that a pan should be like a crescendo of interest, leading from something less interesting to something else more interesting. There's been a lot of argument—verbal and printed—in amateur circles as to whether horizontal pans should properly be made from right to left, or from left to right, and if vertical pans should ever be made descending. This matter of interest should form the conclusive answer to all these arguments: just begin with the least interesting part of your scene, and pan to the part that is more interesting — and direction be hanged! Oh yes, be sure, too, that you both begin and end on a good composition.

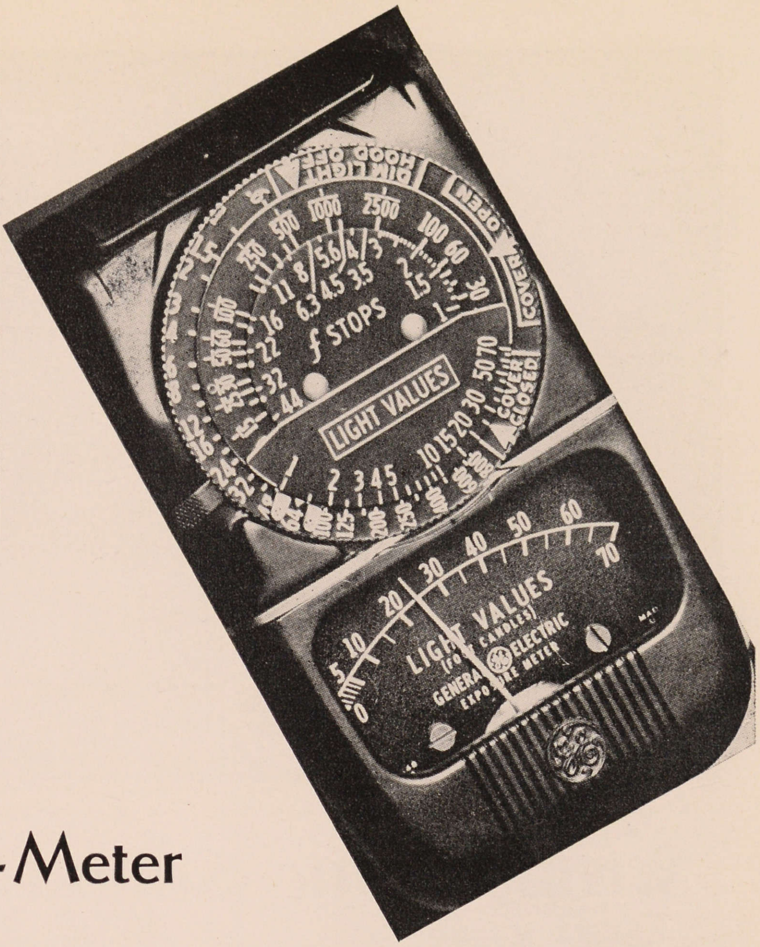
Just review the panning in some of your less satisfactory pictures and see how much it would be improved by following these few simple hints!

Missed exposure is another "should not" you can find a cure for it if you re-analyze your old films. If, like nine out of ten of us today, you use some sort of a meter, you'll probably discover when you study your incorrectly-exposed scenes, that the reason you went wrong on them was either that your exposure-meter didn't "see" the same area your camera did, or that it took simply an overall reading on the whole scene, while you were really interested in some portion of the scene-area which called for—but didn't get—special exposure treatment.

In both cases the fault most probably was that you simply held up the meter, pointed in the general direction of the scene, and accepted what it said without further thought. Now in most exterior scenes, you're likely to include a good deal of sky, which reflects a lot of light and boosts your reading accordingly. But you're not interested so much in the sky as in the landscape, and probably the people in the scene. So tilt the meter down about 30°, so it won't "see" so much of the sky, and you'll get a more accurate reading. If in addition you make a little shade over the meter with your hands—especially in a back-light—and shield the meter still more from that "hot" area, you'll get still better results.

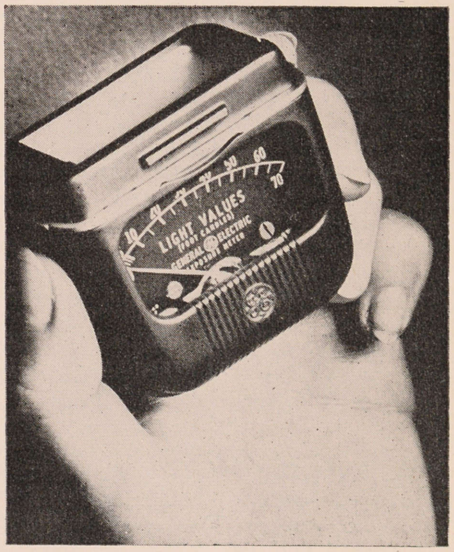
Or your subject may require special exposure treatment—maybe it's a person or object in the shade against a strongly-illuminated background, or out in the sun in front of a large, shady foreground, or a dark-clad person against a light background, or vice-versa. In that case, while your overall exposure may be strictly on the beam, the exposure for

(Continued on Page 272)



Incident-Light Readings With Your Exposure-Meter

By WILLIAM STULL, A.S.C.



Above, left, Rudy Maté, A.S.C., takes an incident-light reading with his G-E meter; note reducing matte in meter. Right, this meter can be used for incident-light readings indoors by removing hood (as below) and using "Dim Light" pointer (top of dial, above) in making calculations. For incident-light readings with any meter, simply place a bond-paper diffuser with 10% transmission over the photo-cell, and use calculator as usual.

TAKING exposure-meter readings by incident, rather than reflected, light has become the universal practice among studio cinematographers. Regardless of what type of meter they may use, all of them—especially on interior scenes—have found that they get more accurate results by pointing their meter's "eye" at the light illuminating the subject than by pointing it at the subject itself. Virtually all of the articles on exposure-metering from the professional cinematographer's viewpoint which have appeared in THE AMERICAN CINEMATOGRAPHER during the past several years have dealt almost exclusively with incident-light metering.

Inevitably, the result has been an increasing number of letters from amateurs and 16mm. professionals alike, all asking the same basic question: "Since incident-light meters like the expensively professional Norwood and the British-made Smethurst-Avo are obviously 'out' for the duration, how can an ordinary civilian like me protect my exposures by using the incident-light method? Is it at all possible to do it with my ——— (you fill in the name!) meter?"

The answer is yes—and almost always, regardless of the make of meter you may be using, so long as it is of the photoelectric type. The results you'll get may not be as perfect as would be the case with a meter designed solely for this type of reading, but once you've gotten the hang of using your meter for incident-light readings, you're almost certain to get results you'll like better than those you ordinarily get with reflected-light readings—especially under difficult conditions.

The easiest of the commonly-used meters to adapt to the incident-light method is the new-type General Electric. This meter, as most G-E users know, has a removable hood and a three-range calculator dial. If you'll look at that calculator, you'll notice three pointers on the lower part of the outer dial. The one at the left is marked "cover closed"; the one in the middle is marked "cover open." And the third—which you've probably more or less ignored, is labeled "dim light, hood off."

When you take the hood off this meter and make your exposure-calculations with this right-hand pointer, the G-E meter is intended to be used as an incident-light meter. Using it this way, you simply place the meter in subject-position (preferably close to the face of your principal subject), point the photocell toward the camera, and take your reading. As the General Electric engineers somewhat conservatively point out in their *Exposure Meter Manual,* "This incident-light method of measuring exposure is highly dependable."

But this is only for the generally lower illumination-levels you encounter in filming interiors. Using the same technique on exteriors, and pointing the meter at the camera on an average sunny day when you're shooting in more or less of a flat front-light, you'd probably shoot the needle up to the top of the scale and then (figuratively, at least) wrap it a couple of times around the peg. And naturally with older G-E models, or with meters of other makes,

(Continued on Page 272)

Strobo-Sync Sound Quiz

By S. JEPSON,

Secretary Amateur Cine Society of India

DUE to the increasing interest in the simple, but effective method of putting sound to silent 16mm. and 8mm. films by the stobocopically-synchronized disc method, we have had a number of inquiries on various phases of the subject. Most of these are excellently covered in the following "Strobo-Sync Sound Quiz" by Mr. S. Jepson, Secretary of the Amateur Cine Society of India. (THE EDITOR.)

Q: If the film breaks what should I do?

A.: Try and stop both projector and phonograph together, and on no account lift the needle; otherwise you might find it difficult to find the place again. After splicing or sticking the film together temporarily with Scotch tape, start them both together. If the phonograph has gone on for quarter of a minute or so, start it for a few seconds to get the commentary and then stop it with needle in position, then start the projector, and when the picture arrives at the commentary place where the needle is, start the phonograph.

Q: If the record gets out of synchronization, what should I do?

A: There are several possibilities, but make sure first whether the sound is in front of the picture or vice versa, otherwise you will make the matter worse. If the sound has got in front of the picture you can speed up projector until the film has overtaken the record and then come back to the proper speed by watching the strobo-disc.

Or if you don't want to do this, you can stop the record (turning down the volume before you do it and when you restart so that there is no noise) by pressing the electric switch (never touch the needle), and as soon as the picture has overtaken the last few words and the gap is closed, restart the record. It is not desirable to increase the speed of the record in order to overtake the picture because this will give a high pitch tone to the voice, but there is no objection to slowing down the record very slightly in order to bring the commentary back to the picture. A simple and effective way of doing this is by applying a handkerchief loosely to the edge of the turntable—the advantage is that when the handkerchief is removed, the speed goes back to what it was formerly, *i.e.*, the correct speed. If you set the speed correctly according to the stroboscopic disc, there should be no need to vary it much and the simplest way is to alter the speed of the projector.

Q: Is it necessary to have two record-playing turntables?

A: No, though the effect is better as there is no break. With one turntable you can allow an interval of 15 secs. during which the phonograph can be stopped, record changed, needle put on the first groove and the record restarted as soon as the second sync mark appears. This means there is 15 secs. silence whilst changing the record.

Q: If the voice is too high, what should I do?

A: This means that the phonograph speed is too fast. About 76 to 78 r.p.m. is the best speed. If the voice is too low, it means the speed is too slow. In case of doubt you can check a turntable's revolutions by actually counting the revolutions with a stop-watch.

Q: Is it necessary to project at 16 frames per second?

A: No, what is necessary is that the ratio originally established between projector (or camera) and turntable in the recording must be maintained in projecting. You can make your record with projector and turntable operating at any speed, but you must always maintain those relative speeds thereafter.

Q: Why is the playing time put on the record?

A: As a guide so that you know how long it will last, also so that after some months you can check it and see if the grooves have become polished, when it might play faster. In this case, you will have to fit a disc containing more bars than the original one, when the disc appears to revolve to the right, this means a disc of more bars is required. Fifteen secs. clockwise revolution in one complete circle means a difference of two bars, and 30 secs., one bar.

Q: How can I remember easily how to synchronize the disc?

A: If the disc is apparently moving clockwise you must increase the speed and vice versa. So remember the formula "down to the right; up to the left."

Q: Are the records breakable?

A: No. But the acetate surfaces are soft, and very susceptible to fingerprints. *Never* touch the face of the disc, either before or after recording.

Q: What needles should I use?

A: This is important, for if you use hard needles or the wrong kind, or old ones which are worn (you can examine them under a glass to see how they are worn), records will wear out. "Transcription needles," which are soft, are the best and give the best tone, though trailer needles bent at an angle are also good. Wooden fibre needles are good but do not last, and if they become blunt they will give an echo. They should be resharpened with a knife or patent sharpener. The Indian Babul bush thorn of the right shape makes a good needle, as do cactus spines, but will not give as much volume as the metal needle.

Q: What are the different methods of synchronization?

A: The record has on it a stroboscopic disc, and if the record is started when the white circle sync-mark flashes on the screen, then sound and picture are synchronized. If it gets "out of sync,"

(Continued on Page 272)

AMONG THE MOVIE CLUBS

Post-War Cameras

Though neck-deep in war production, the makers of America's home movie cameras are none the less planning the improvements they will incorporate in their post-war designs. In this, they need the help of the users of substandard cine equipment. Recently J. Harold Booth, Vice-President of Bell & Howell, sent a letter to most of America's amateur movie clubs, asking what they wanted in post-war cinemachinery. For the benefit of clubs this letter may not have reached, and of individual cinefilmers, whose opinions may be no less valuable, we reprint some of the highlights of Mr. Booth's letter:

"What type of lens equipment do you consider ideal for home movie making? How long should the 'spring run' be, remembering that power for extra footage means extra weight? What 'gadgets' are really useful, as compared with gadgets that are actually used only infrequently, and simply complicate your movie making? Would you be interested in making sound-on-film movies in 16mm.? . . . in 8mm.?

"A few movie clubs have already had sessions with 'The Camera of the Future' as their topic. They report these sessions were outstanding. We suggest that at one of your early meetings you plan a similar program. Then send us a brief summary of the general ideas suggested by your members for the movie camera of tomorrow."

We at THE AMERICAN CINEMATOGRAPHER would also welcome suggestions from our readers along these lines, for we would like to set forth not only what we personally feel is possible in post-war camera design, but what our readers want. All of us, as practical users of substandard equipment, have our ideas of what should constitute the ideal home movie camera or projector. We have complained over the shortcomings of existing models. Now—while the manufacturers are laying plans for post-war designs—we at last have a chance to make our desires and opinions heard effectively. Let's make the most of it! THE EDITOR.

N. Y. Metro Elects

Following the balloting at the May meeting of the Metropolitan Motion Picture Club of New York, the following were announced elected as directors of the club for a three-year term: George A. Ward, Annette C. Decker, George Mesaros and Joseph J. Harley. At the May 25th Board Meeting, the new board elected the following officers for the coming season: President, Leo Heffernan; 1st Vice-President, Joseph J. Harley; 2nd Vice-Pres., Frank E. Gunnell; Secretary-Treasurer, Sidney Moritz. As Bob Coles, the club's perennial Secretary, has been called into the Armed Service, it was decided to combine the offices of Secretary and Treasurer "for duration plus six months," with the hope that military life may have hardened Bob for another long term of club office.

Scheduled for the June 10th meeting, which closes both the club's season and Joe Hollywood's term as program chairman, are the following: "Sun Valley," by Harry Groedel; "Winter Holiday" and "Manhattan," by George Serebrykoff; and "Mars," a fantasy-film made by Adventure Pictures, of Passaic.

FRANK E. GUNNELL.

4 Hits for L. A. Cinema

The June meeting of the Los Angeles Cinema Club was made memorable by the presentation of four of the most outstanding 16mm. films the club has ever screened. First was "Old Mexico," 16mm. Kodachrome by Russell B. Mullin. Second was Fred Ells' Kodachrome remake of his classic "In the Beginning," accompanied by phonograph records. Third was "Ciné Whimsy," black-and-white sound-on-film, by Member Newell Tune and Robert Fels (See AMERICAN CINEMATOGRAPHER for May, P. 179.) The fourth was a surprise feature, sent by the Indianapolis Amateur Movie Club to William Stull, A.S.C., of THE AMERICAN CINEMATOGRAPHER, and brought to Los Angeles specially for the meeting by its director, Dr. (now Lieutenant Commander) J. W. Sovine, now serving with the Navy Medical Corps in San Diego. Titled "Amateuriana," and running 800 feet of 16mm. Kodachrome, this film proved to be an unusually clever satire on the making of club productions. At its conclusion a hearty vote of appreciation was extended to both the Indianapolis Amateur Movie Club and Dr. Sovine for going to so much trouble to make this showing possible.

ALICE CLAIRE HOFFMAN,
Secretary-Treasurer.

Minneapolis Nominates

The June 22nd meeting of the Minneapolis Cine Club turned political as the nominees for the club's 1943-44 offices were to fight it out at the polls. Nominated for President were Dr. Leonard Martin and Earl Ibberson; for 1st Vice-Pres., Bill Weber and Oscar Haertel; for 2nd Vice-Pres., Steve Boyles and Dr. Kenneth Miner; for Secretary, Al Anderson and Ralph Bowman; and for Treasurer, Oscar Berglund and Charles Beery. For the two vacancies on the Board there were three nominees: Falconer Thomas, Rev. Henry Lewis, and Fred Grabow. Following this meeting, the club will take its usual vacation adjournment until next September.

ROME A. RIEBETH.

Varieties for Utah Cine Arts

The June meeting of the Utah Cine Arts Club (Salt Lake City) scheduled an unusually varegated program, including "Down Mexico Way," 16mm. Kodachrome by Mr. and Mrs. Vern Lunt; "Western Wild-life," 16mm. Kodachrome by Frank E. Gunnell of New York's Metropolitan Motion Picture Club; "Riding My Hobby," by G. Van Tussenbroek, and a demonstration of moviemaking by an expert.

VIRGINIA SMITH,
Secretary-Treasurer.

Ladies Win In Syracuse

It's no longer "the boys from Syracuse" with the Syracuse Movie Makers Association. During the nine years of the organization's life it has maintained a strictly bachelor existence — excluding women, not because we wanted to, but because there had been no demand from the fairer sex. However, due partly to an editorial remark in the club's new paper, "The Viewfinder," and partly to pressure from some members' wives, the by-law was amended and women amateur cinematographers are now given full and active membership in the club if they decide to join. Five at once did so, and the June 1 gathering was their first meeting. On the screen was a dual sneak preview of the club's finished production, "The Hollow Idol," in both its 16mm. and 8mm. versions. Following a general discussion, suggestions for changing the 8mm. copy so it would more closely tally with the 16mm. version were noted down, and it was also revealed (much to the chagrin of the 8mm.-ers) that the 16mm. boys had done a much superior job of editing and titling. An exchange film from the Philadelphia 8-16 club, showing the production of their journal, "Close-Ups," was shown, and inspired us (when we can get the film!) to try our hand at making a similar comedy about the production of our own club paper.

On June 29th, the club is holding an outing and picnic supper in one of the city parks, and three films from the library of THE AMERICAN CINEMATOGRAPHER—"Nite Life," "Red Cloud Lives Again," and "Garden Life"—will be shown. A summer of outdoor meetings in parks and on members' lawns is planned, as a substitute for the out-of-town outings and vacations of pre-gasoline-rationing days.

D. LISLE CONWAY,
President.

HOME MOVIE PREVIEWS

AMATEURIANA

Scenario film, 800-ft. 16mm. Kodachrome.
Filmed by the **Indianapolis Amateur Movie Club.**

Here's a picture that every movie club—and particularly those whose form of the hobby is making scenario productions—ought to screen. It is a delightful satire on the making of a club production, deftly directed by Dr. Joe W. Sovine and excellently Kodachromed (in the 16mm. version viewed) by Dr. William E. Gabe.

The story is very cleverly told, though it seemed to us that a few more close-ups and spoken titles could have been used in some sequences, and some improvement might be possible in the way these spoken titles were cut into the action scenes. Too few amateurs remember how this technique was used back in the days of silent professional films. Then, the best practice was to cut to a close shot, if not an actual close-up, of the player beginning to speak; then as soon as his mouth started moving, cut in the title, and thereafter cut back to the *same* action-scene as before, but just at the end of the actor's lip-movement. This made it absolutely clear who was speaking at all times—a very important consideration in silent pictures, and doubly so when using amateur actors.

Dr. Gabe's camerawork is generally excellent, though here and there one remembers a scene in which—probably for very good reasons—the background intruded somewhat on the more important foreground action. His handling of the interiors was uncommonly fine—especially the difficult task of lighting for a Kodachrome long-shot the very large room used for the club meeting scenes. In this, it may be that a scarcity of lighting units (not to mention bad moments with the fuse-box!) made his lighting a good deal more sketchy than some of Eastman's experts would probably recommend: but on the other hand, the result was an effect-lighting which would win the praise of any studio cinematographer, and which was vastly more realistic than any technically perfect, flat, overall lighting ever could be. The film we saw was a duplicate, made by Geo. W. Colburn's laboratory, and an excellent one throughout.

WONDER FILM

Documentary, 125 ft. 8mm. Kodachrome.
Filmed by **Joseph F. Hollywood.**

Joseph Hollywood has an exceedingly clever technique of putting what most of us might term unpictorial, abstract ideas into visual form on the screen. In this case, it is the remarkable performance of 8mm. film. When you put down in cold type the facts that an 8mm. frame measures 4.8 x 3.5mm., or a total area of 16.80mm., and that when it is projected onto a screen six feet wide, with an area of 2,430,000mm., the original 8mm. image is magnified 144,643 times, you begin to have an appreciation of what 8mm. can do. But when you see this pictorially illustrated for you, as Hollywood does it, you can really begin to appreciate the marvel modern photochemical and optical science have put into our hands.

As usual, Hollywood's photographic technique is excellent, especially in the effect-lighted scenes showing the projector apparently running, and in the others showing the picture apparently on the screen. His cutting and titling are also up to his customary standard, the latter enhanced considerably by the use of color. However, as he himself admits, the closing part of the picture does not quite seem to "jell". My suggestion for remedying this would be to show, after the shots of the 8mm. camera, a succession of breath-takingly beautiful Kodachrome scenes showing what 8mm. at its best can put on the screen, as well as, perhaps, a few "homey" shots of the typical home movies for which 8mm. is so extensively used. This, preceding the film's present ending (beginning with the silhouette shots of the projector running) should bring "Wonder Film" to a climax befitting its subject matter and medium.

PORTLAND, CITY OF ROSES

Travelogue, 150 ft. 8mm. Kodachrome.
Filmed by **William Peterson.**

One of the hardest things to do is to make a home movie reel which really typfiies your home town. Photographically, this little picture is excellent, especially if one makes allowance for the moist climate of the Pacific Northwest. But as a picture, it could stand a bit of improvement.

The first things for anyone who wants to make a picture of this type to do is to sit down and try and list—on paper—the various details which make *his* particular town different from others. And there's always something—even though you're so accustomed to it that you're likely to pass it by unnoticed. In Portland, of course, it's the roses and the celebrated Rose Festival. But that isn't in itself quite enough material upon which to hang a picture really representing your town.

In this reviewer's estimation, the sequences with which this picture opens fail to do this. They show Portland, indeed, but in aspects which tend too much to show features which are basically the same in *all* cities of that size, rather than those which set it apart from the others. Nearly all such cities have tall buildings and bustling streets. Most of them, save in dim-out areas, have spectacular displays of neon signs—very excellently photographed, these, by the way, in this picture. Most cities have an abundance of neat, typically-American homes. But none of these details set Portland apart from any other city of its size.

This reviewer doesn't happen to know Portland, so it's up to cinefilmer Petersone to find the answer in detail. I noticed one such little detail, however, which was lost—in fact, deliberately panned away from—in too close attention to conventional shots of big buildings. This detail was one Mr. Peterson probably didn't notice, it was so commonplace to him, or, if he did, he considered it obtrusive. It was an electric-trolley-bus rolling down one of the main streets—and Portland is one of the few cities in America which uses these trackless trolleys. A complete sequence could be built up on this detail alone. Similar sequences could be built up on other similarly exclusive details, not only of scenery, but of family life and customs. And you'd end up with a real picture of Portland as it would appear to a visitor's eyes, seeking the unusual, and culminating, of course, in the excellent scenes of the Rose Festival minus, we hope, the short shot of the float with the Japanese children waving the rising sun flag!

CINE WHIMSY

Scenario, 800-ft. 16mm. black-and-white; post-recorded sound-on-film.
Filmed by **Robert Fels** and **Newell Tune.**

This is a clever picture of very nearly professional quality, based on the amusing idea of presenting literally some current slang expressions. Its chief faults are that it really needs a somewhat faster tempo in both cutting and action, and that it was photographed on black-and-white negative rather than on Kodachrome. The latter, of course, is wholly excusable in these days of film-shortages. The former could probably be remedied, to some extent, at least, through quicker re-cutting.

A remarkable feature of the picture is the excellence of the trick camerawork, and also how well the post-recorded dialog generally matches the lip-movements of the players. All told, while the film may not quite reach the mark at which its director aimed, it is none the less a very worthy short, and one which is, besides, thoroughly amusing.

CALIFORNIA WASHDAY

Scenario Home Movie, 100 ft. 8mm. Kodachrome.
Filmed by **Dr. Joe Sovine.**

Here's another amateur picture that deserves wide distribution. It is nothing that could not be photographed easily in any filmer's back-yard—just the story of a little girl's wash-day, and how she carefully launders her "Dumbo" doll. But between Dr. Sovine's excellent Kodachrome camerawork, which is almost perfect as to exposure, and excellently composed, and his keen sense of continuity, "California Washday" is an almost perfect example of what a real

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home movie could be—but seldom is. We've seldom seen a film which evidenced better continuity; here and there, perhaps, a slight rearrangement of scenes might be advisable—as, for example, a closer grouping of the various shots showing young Miss Sovine dunking her doll up and down in the tub—but in general, Dr. Sovine has turned out a picture which ought to be studied by most of the home filmers we know. The performance his young star turns in is also something that ought to rate an amateur Oscarette as well.

Photography of the Month

(Continued from Page 257)

Mellor photographed before entering the Army—is another example of Technicolored filmusicals at their picturesque best. In this case, the locale is the antebellum South, and the birth of the minstrel type of entertainment, backgrounded against Dan Emmett's delightful songs. Cinematographer Mellor's contribution is perhaps his best job of color camerawork yet, and one which makes "Dixie" well worth the price of a repeat admission.

The uncredited special-effects work by Gordon Jennings, A.S.C., and the transparency-projection process work by Farciot Edouart, A.S.C., and his capable staff, are further highlights. Some of Edouart's process-shots — especially on the river-boat—are unusually fine examples of the intricate type of perspective-matching between set and background at which he so greatly excels.

A.S.C. On Parade

(Continued from Page 256)

dor Sparkuhl, A.S.C., is assigned to "Ministry of Fear." Thanks, too, to **Charlie Lang, Karl Struss** and Camera Chief **C. Roy Hunter** for their courtesy to our friend, Lt.-Cmdr. Joe Sovine, of the Navy Medical Corps, when we took him over there to see how movies (other than 8mm.) are made.

★

We spent a pleasant fifteen minutes the other day when we dropped in to say "Hello" to **William Sickner, A.S.C.,** busily putting another Universal serial on film. Hope we didn't cramp his style . . . he only got two set-ups shot in that time!

★

Add pleasant surprises: the other day we walked on **Johnny Fulton's** big process stage out at Universal, and who should we see working there but **Eddie Linden, A.S.C.,** and **Harry Zech, A.S.C.** And was that spare cigar of **Harry's** a godsend when we found ourself fresh out of cigarettes with four or five errands yet to do on the lot!

★

Did you know that **Major Ted Tetzlaff, A.S.C.,** has a double rating in the Army Air Force—? He's not only a cinematographer (everybody knows that!) but holds a Service Pilot's rating, as well.

Hollywood's War Plants

(Continued from Page 252)

on a few minutes' notice, and the wildly inconceivable to be accomplished overnight, have given Hollywood's cinetechnicians the ideal training for wartime production. The normal, peace-time work of their daily lives has convinced them that there are no such words as 'impossible' or 'it can't be done' to a fellow who, like these men, combines sound technical engineering with the fertile ingenuity of the motion picture industry. Like the man in Edgar Guest's poem, the unsung engineers, technicians and workmen in the many big and little plants which have so long served the film industry are rolling up their sleeves and accomplishing the impossible." END.

Lin Dunn

(Continued from Page 254)

serts, may be grouped together in a single, centralized organization.

In any event, optical printing can do a great deal to simplify and supplement the work of all these other specialists by taking their individual contributions to a trick-shot and combining them into a final composite scene. For example, the background plate for a back-projection process shot may call for a scene which combines full-scale "live action" with a miniature, and topped by a matte-shot. The optical printer can take all these various separately-photographed components and blend them together to produce a wholly natural-looking scene which is then used as the projected background for the process-shot. Then the optical printer may again come into play to begin or end the composite process-shot by blending it into another scene by means of optically-produced wipes, fades or dissolves.

In addition, the optical printer can do a very great deal to improve conventional "production" scenes in ways the director, producer or cutter may not think possible. For example, dolly-shots can often be made into stationary-camera shots, and stationary shots into dolly-shots by skilled optical printing. Often if the set crew dollied too close in, or not close enough, or at the wrong level, this can be corrected in the printer. And these optically-made dollies, if done perfectly, cannot be distinguished, even by experts, from those made actually on the set.

Dunn has used his printer to "doctor up" many a scene which would otherwiwse have had to be retaken. One of this writer's favorites was when, some years ago, the rushes disclosed that in an oil-field location scene a truck, bearing all too prominently the name of a well-known oil company on its side drove nonchalantly through the scene. Working carefully, frame by frame, Dunn completely obscured the objectionable lettering, and saved the day. On another occasion a crashing airplane was supposed to come to rest, upside down, and the injured pilot drop out and crawl away just as the wreck enveloped itself in menacing flames. Everything went off perfectly on the set—except that the flames failed to start until the actor was well out of the scene. Dunn's printer obligingly moved the flames ahead, so that in the final print they seemed to burst out at precisely the most suspenseful moment—and a retake was neatly avoided.

Dunn's first really spectacular achievement in optical printing was in "Flying Down to Rio" in which, some years ago, RKO introduced not only Fred Astaire but the striking trick effects an optical printer could produce for transitions. The picture included a dazzling display of wipes, melts, and other transitions, carefully synchronized to music and action, and never since excelled, though for some years every studio tried to do so before settling down to accept such optical transitions as a complement to, rather than a substitute for such conventional scene-changes as fades and dissolves, which latter, of course, are now made optically too.

But by no means all optical printer work is of so obvious a "trick" nature. "'Citizen Kane,' for instance," Lin remarks, "was one of my recent pictures which employed optical tricks to the limit. The picture was about 50% optically duped, some reels consisting of 80% to 90% of optically-printed footage. Many normal-looking scenes were optical composites of units photographed separately, and which *could* have been handled completely by straightforward methods. One such scene was a pan down from a statue of a man to live action at the base of the statue. The statue itself was a miniature, and both it and the full-scale action at its base were photographed as separate, stationary shots. The two separate scene-components were joined by a traveling split-screen and the vertical panning movement was also put in on the optical printer.

"Another scene of the same type was the shot of the camera rising from the stage of the opera-house to show two men in the flies, far above, showing their disgust at an indifferent performance going on below. This was photographed in three sections. First, the camera on an elevator, rising from a full-scale stage; second, a miniature of continued upward movement through ropes, curtain and sets, and finally another elevator-shot, full-scale, up to the two men in the flies.

"This differed from the previous example in that the upward camera motion was originally photographed, of course with the camera-speeds of the miniature and full-scale components carefully matched. But the scenes had to be fitted together in the optical printer, using a synchronized, soft-edged downward wipe-off, blending on and aligning certain matched parts of the three sets. The final composite scene created a feeling of long travel from the stage to vast heights.

"Both of these illustrations are definite

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examples of the way optical printing can create a scene which has no appearance of being a trick-shot, because to most people—even studio technicians—there is no obvious reason for it to be made by other than straightforward 'production' methods, But by making these scenes as outlined, certain production difficulties (usually appearing unexpectedly) were overcome, with a sizable saving to the studio—but possibly a few headaches to the optical man!

"There are certain essential fundamentals to successful optical printing which cannot be overlooked. One is the design of the printer: it must be practical from the operator's viewpoint. Too often one finds mechanically excellent machines which are unnecessarily awkward or slow to operate. Such machines were probably designed by mechanical engineers who took little or no time to consult — much less collaborate — with the optical printer conematographer. Yet even so simple a detail as high-speed rewind may save as much as an hour or so of working time in a single day's routine operations.

"Equally important is thorough-going cooperation between the optical man and the laboratory. Even the simplest of optical work involves the making of dupe negatives, and some of the more complicated shots may mean making of double and triple dupes. If the laboratory operations are not perfectly consistent, and perfectly coordinated with the requirements of the optical man, the results cannot be perfect. Some years ago I developed a special strip to aid in this laboratory control. It is now used throughout all our trick laboratory work, and has been adopted at the Consolidated Film Industries' Laboratory as one of their checks on density, contrast, definition, flare, fluctuation and other factors in both negative and positive processing, especially where trick work is concerned. Fortunately for me, the cooperation I've received from Vernon Walker, A.S.C., head of the RKO Camera Effects Department, from my assistants and other co-workers in both this and the editing department, and from the Consolidated Film Lab. has made my work most interesting and enjoyable."

In his spare time, Dunn is designing special optical printers for the U. S. Navy, Signal Corps and Air Force, which are being built by the Acme Tool and Mfg. Corp. in Burbank. His hobbies are his three small girls, music, and 16mm. cinematography. (He is an active member of the Los Angeles Cinema Club.) He has recently completed the first truly profssional (as judged by major studio standards) 16mm-to-16mm. optical printer.

"The big problem in this," he says, "is to find the time I would like to spend in 16mm. experimentation, for I feel that after the war 16mm. is certain to take the place of 35mm. in practically all profesisonal uses except major studio production—and possibly in some types of studio work, at that. The time when we could regard 16mm. as a mere hobbyist's toy is definitely over; the big job it is doing in military and industrial training films is evidence enough of that. The greatest obstacle now in the way of 16mm. is carelessness in those who use it. When 16mm. is photographed and processed with the same standard of care and accuracy that 35mm. now enjoys, we're going to see vastly improved results which will surprise many of us." END.

Virge Miller

(Continued from Page 253)

to the Studio's camera machine shop, where he served, first as assistant and later as chief, until 1916.

There he found plenty of problems to interest his active and mechanically-inclined mind. "The cameras we used in those days, not only at Universal but at any other studio," he says, "were probably the most motley collection of photographic machinery ever assembled. The studio had some cameras, but a lot of the best men prided themselves on having their own outfits. About every imaginable kind of camera was represented: there were French Gaumonts and Eclairs (we called the latter 'Gillons' for some reason nobody ever could tell), DeBries and the old, dependable Pathé Professionals; there were English Prestwiches, Moys and Williamsons; and the aristocrats of the camera stable were a few of the then ultra-modern Bell & Howells.

"Keeping those old babies in working order was an assignment that would make many a modern camera-mechanic acutely sick. No two of them—even of the same make—were likely to be quite alike, and the differences weren't only in the big, obvious things like movements, film-magazines and lens mounts, but in irritating little things like screws, bolts and threads. Some would be built to metric standards; others more or less to British standards, and a few to American standards. Often, to replace a lost or damaged screw, you'd have to cut your own, and until the Bell & Howell came along, most of the cameras were built by rule of thumb and guesswork rather than by the precision engineering we know now.

"Adding to the problem were the innumerable gadgets each cinematographer tacked onto his individual camera. Some of them were workable and some weren't; most of them were designed to eliminate 'static,' which was the big bugaboo of cinematography until the early '20s, when Eastman brought out their 'X-back' negative. Until then, film had one side coated with emulsion, and the other just bare celluloid. In cool weather, a charge of static electricity would build up in the film, and as the negative unrolled in the magazine or went through the camera, blue electric sparks would crackle along the film just like sparks from a cat's fur, or from an amber rod that's been rubbed in a piece of silk. The result on the negative was something like a crooked, many-limbed tree-trunk, usually right down the

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middle of the frame. Probably it was caused by friction against the bare celluloid (which, for this purpose, acts quite like an amber rod), and the felt light-traps we had in most magazines probably helped, too; the fact that most cameras were housed in a wooden box, almost completely insulated from the ground by the wooden tripod-legs and the wooden handle of the camera-crank was also very likely a factor.

"At any rate, every cameraman had his pet gadget for 'positively eliminating' static. Some had little spirit-lamp heaters attached to the camera to warm it up; others had elaborate systems of wiring (which usually led from nowhere to nowhere) to draw off the charge—they hoped!—and the variety of non-static pressure-plates of felt, rubber, glass and even polished wood were incredible. Some of these gadgets may probably have helped, as did the sensible precaution of avoiding subjecting the film to quick changes of temperature in cold weather: but it took Eastman's 'X-Back,' which consisted of some sort of coating on the back of the film, really to cure it.

"We had another problem in those early days which was more in my line. Often in shooting interiors under artificial light, the boys found their fades—all of which were made in the camera—flickering inexplicably. The fade might start normally as the cameraman began to cut his shutter-opening, and then all of a sudden there would be a completely black frame, or an irregular succession of them, which made the fade flicker in and out most unpleasantly.

"That was an easy one to solve, though. We were using 50-cycle Alternating Current then, and as I knew that an arc operated on A.C. goes completely out at each cycle-change, I knew that the flicker was caused because the decreasing aperture of the shutter which made the fade would sometimes reach a point where the shortened exposure-period of the revolving shutter would synchronize with the dark period of the arcs lighting the scene. (That, by the way, could still happen with any modern professional camera or a 16mm. like the Cine-special making shutter fades on a set lit with A.C.-powered arcs.) I cured it by introducing diaphragm fades, for which I had to rebuild the diaphragms on all the studio's lenses so that they would close down to a complete blackout, just as the lenses on some amateur cameras like the Filmo 8's do today. This couldn't sync with the arc-flicker, so it proved an effective cure. Other studios tackled it differently, switching over to Direct Current instead of A.C., which took most of the flicker out of the arcs, though really flickerless arcs didn't come until a few years ago, when they were developed for use with Technicolor."

As Virge got closer and closer to cameras and camerawork through his camera-shop experience, he began to learn more and more about cinematography. Before long he was making photographic tests of cameras and equipment. Then he began to help various cameramen out with intricate multiple-exposure and other trick shots, in which his engineering experience proved valuable. And now and then in an emergency he would go out on the set and grind an extra camera when one was necessary.

Finally a real emergency came. One of Universal's troupes had to do some work at night in order to finish up with an important player who had to start another picture elsewhere the next day. The cameraman for some reason couldn't work that night, and about 7 P.M. came a hurried call for Miller to go out and "fill in" as First Cameraman for the night's work. Feeling he had at least half the world's responsibilities resting on his shoulders, Virge grabbed a camera and kept the troupe going.

A day or so later, after seeing that night's rushes, the director came to Miller with a request that he finish the picture. At first Virge refused, unwilling to displace another man; but later the other cinematographer — solidly estab-

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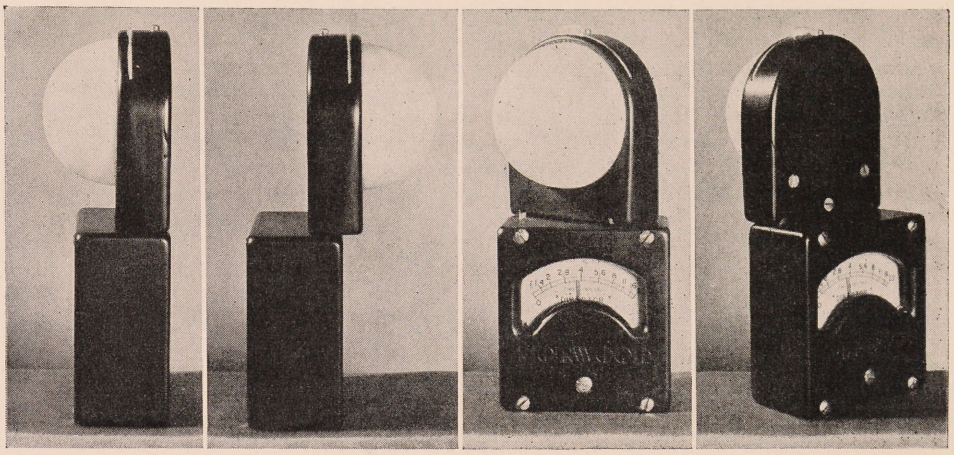

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★

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lished as one of the studio's ace cameramen—insisted on stepping off the picture so that Virge could have a chance at camerawork. And Virgil Miller became a full-fledged First Cameraman.

And as a First Cameraman or Director of Photography he has stayed since that day in 1916. Ten full years he spent at Universal, where he photographed 110 feature productions, including the memorable silent version of "Phantom of the Opera," and many others which ran just about the complete gamut of camera-fodder, from "westerns" to mystery melodramas and drawing-room comedy, so it is no wonder he became one of the very earliest members of the A.S.C..

The three following years he spent at Warner Bros. and RKO, until in 1929 he was appointed head of Paramount's camera department. During his six-year tenure in this office he pioneered many of the phototechnical developments which helped the industry adjust its camera technique to sound, and during this period, too, Paramount directors of photography captured the Academy Award for six consecutive times.

Leaving Paramount, he paused long enough to photograph one picture, and then became head of the Selznick Studio's camera department, where in addition to his administrative duties he served actively behind a camera on special-effects and other sequences for several productions, including the Technicolored "Garden of Allah." After this came a year of free-lancing, including some time spent on special color research, and finally a six-years' association with 20th Century-Fox, during which time he has done just about everything from "Charlie Chan" and "Mr. Moto" whodunits, with their always intriguing opportunities for effect-lighting, to conventional program films and pinch-hitting on important Technicolor specials.

Miller's approach to his work is to strive first and foremost for visual smoothness, with pictorial effectiveness dependent on story values. Photography, in his estimation, should be always held subservient to the story; and so well does he adhere to this that often players working with him for the first time have expressed amazement that while he keeps his camerawork so generally unobtrusive, he manages also to make them appear to such advantage on the screen. Yet when story and action permit, his camerawork can be as spectacularly pictorial as that of almost any man in the profession. His camerawork, in fact, reflects his personality to a striking degree, for while genial and friendly, he tends also to be somewhat shy and retiring until he has something to say: then he says it, and with a clarity that leaves you in no doubt that this man Virge Miller has plenty on the ball! END.

Strobo-Sync Quiz

(Continued from Page 264)

increase or decrease speed of projector for a while.

When the stroboscopic disc appears to be stationary, it is synchronized, and the disc has to be illuminated by the projector flicker. This can be done in several ways.

1. By lighting it from the screen, near the screen.
2. By putting the running projector light on the revolving disc before starting and keeping projector and phonograph steady afterwards. This does not allow you to compensate for loss of sync.
3. By throwing some light on the stroboscopic disc from the front of the lens by allowing the projector ray to pass through any piece of optical glass (an old cleaned negative will do) *tilted at the right angle found by experiment.* This is recommended as it is simple and effective.
4. By linking projector electrically with a neon bulb fixed over the phonograph. This is complicated but best of all.

Mistakes Teach

(Continued from Page 262)

the person or object in which you're most interested will be over or under, depending on that subject's relation to the rest of the scene. The answer is simply to barge right in close to the subject and make your meter-reading from a point so close the meter "sees" only that and misses that "hot" background or that shadowed foreground. Then, though your overall exposure may suffer, you'll be on the beam as far as your really important subject is concerned.

And by the way, now that Kodachrome is such a scarce commodity, a lot of us are going to have to shoot black-and-white—and like it—instead of the color-film to which we've become accustomed. This means we'll have to watch out for monochrome tonal values, and make tonal and lighting contrasts take the place of color-contrasts in giving us the separation we need to make a subject stand well out from its background.

In Kodachrome, for instance, you can shoot a girl in a dark-blue dress standing in front of a dark-green hedge and be quite sure that the color-contrast between the blue dress and the green foliage will make your girl stand out pleasingly from her background. But in black-and-white, the dark blue of the dress and the green of the shrubbery will very probably both come out in much the same tone of dark gray, and girl and hedge will merge together in your shot almost as completely as though a camouflage engineer had been at work.

The answer to this is to change your viewpoint so that you get your girl in front of a different background which—judged from a viewpoint of black-and-white rendition, is either darker or lighter in tone *or in illumination* than your girl and her costume. Or, if conditions permit, you can shoot the scene in a back-light, which would produce an outlining highlight around the girl, and so separate her from the similar-toned background.

If your moviemaking goes back before the days of Kodachrome, just run a few of your black-and-white scenes—good and bad—and you'll be able to figure out a lot of little tricks like this which will help you make the transition back to monochrome without wasting film.

Another fault we see only too often is cropping off foreheads or shoulders in close shots. This is simply because the man at the camera forgot that the finder, necessarily removed at least slightly from the position of the lens, and the lens itself do not cover quite the same field when the subject gets within about ten feet of the camera. Technically it's called finder parallax, and if you want to you can work up all sorts of interesting gadgets to offset it, including alignment gauges which permit you to slide the camera so that for lining up, the finder occupies the same position the lens will in shooting, and interchangeable, or even automatically moving mattes in the finder, to indicate the correct framing for closer shots.

But the simplest way to do is to fit onto your finder a little mask of colored cellophane or Scotch tape which will indicate the direction in which the cropping occurs, and approximately the proportion you've found cropped off on the closest shots you usually make. If your finder is directly above the lens, the mask should trim off a strip at the top of the finder; if it is directly beside the lens, the finder mask should be at the side; if the finder is above and to one side of the lens, the mask should indicate both top and side. This way, the finder is perfectly adequate for long-shots, while for close-ups that little transparent colored mask will serve as a reminder that if you don't want to waste film, you'd better allow for finder parallax!

There are plenty of other film-wasting faults you're likely to find if you review your old films—especially the bad ones—carefully. Each of them will tell you something you should *not* do if you want to get the maximum usable footage out of the film you may be lucky enough to buy. In many cases you may be able to rig up some simple gadget like those cellophane finder-masks which will remind you of that particular mistake. And at any rate, by looking along your celluloid back-trail, you can find "*should nots*" which, coupled with the other things you've since learned you *should* do, will lead to better pictures on less film. END.

Incident-light Metering

(Continued from Page 263)

you can't use this system at all.

The answer here is to reduce the amount of light affecting the meter's cell to a proportion which won't overload the cell, but which will still give you an accurate reading. There are several ways of doing this.

Studio cinematographers, who use both G-E's and Westons for incident-light readings while making interiors, generally make this compensation by using a little metal matte with a hole in the center which will admit only 10% as much light as would reach the photocell without the matte. This is a step in the right direction: the proportion is correct, but using a matte which employs only a comparatively small part of the photocell's total sensitive area is a chancy matter. The meter-makers themselves will admit—if pressed—that when turned out, as they must be, on a mass-production basis, it is impossible to be absolutely certain that *every* section of *every* photocell will have a uniform sensitivity to light. So if you concentrate the 10% of the cell-area you are using into a single section, it is entirely possible that you may introduce considerable errors which can throw your reading badly off.

Using a matte perforated with small holes, scattered uniformly over the cell area, but totaling only 10% of the total area of the matte, is a much better method—but it's also a mathematical headache for most of us.

A much more simple and practical method is to cover the cell with a translucent diffusing screen which will cut down the transmission to the 10% you want. This diffuser can be of opal or ground glass, but the simplest way to make one is to use a simple sheet of white bond paper having, of course, the desired 10% transmission, cut to the right size and shape to cover your cell, and mounted at the end of a suitable little cardboard tube.

Determining that transmission factor is easy enough. Just take an incident-light reading on a comparatively low-powered light-source (so you won't overload your photocell), and then try different pieces of glass or paper until you get a reading one-tenth of that—naturally, with the light-source and meter always in the same relative positions. For instance, say your first reading is 50 on your meter's scale: a diffuser with the 10% transmission you want will give you a reading (with the meter, remember, the same distance from the lamp both times!) of 5.

After that, you can use your meter—whether it's a Weston or a G-E of any model, or any other type—for incident-light readings indoors or out.

The exposure-readings you'll get using the meter's calculator-dial in the normal way will be as valid for incident-light readings as they would be (minus the diffuser) for reflected-light readings. And usually a good deal more accurate!

Unless used with more than ordinary expertness, you see, a reflected-light reading can be thrown off the beam by an amazing number of variables. First of all, either on interiors or exteriors, such a reading can be thrown badly off by difference in either illumination or reflectivity between the actual subject and the background. For instance, a reflected-light reading—especially from camera-position—of a girl in a white dress against a background of dark foliage will be thrown off by the larger area of dark background until the white-clad girl is likely to be overexposed. Similarly, a dark-clad person in front of a light background—whether it's a white stucco wall or the vast, reflective expanse of the Grand Canyon on a sunny day—will probably be underexposed because of the greater area of more highly-reflective background. The same thing applies to subjects or backgrounds, one or the other of which is in the shade.

Indoors, under lights, your meter-reading is likely to be thrown off the same way unless you take your reading with the meter only three or four inches from your subject's face. Even then it's subject to error, for you're all too likely to read on the shadow your meter-holding hand casts from one of the front-lights. If you use any back-light or cross-light, your reflected-light meter-reading is always likely to be boosted because one or more of these lamps may be shining directly into the meter's eye.

Using the meter as outlined above for incident-light readings, you eliminate most of these variables. The most important thing in most shots is the tonal (and color) rendition of the subject's face. Luckily, it is usually one of the middle tonal values of a picture, so if you get the face-exposure right, the other parts of the picture will take care of themselves, going up or down from this median tone as they naturally should. So, whether in black-and-white or color, if you balance your exposure to the illumination on the subject's face, you're almost certain to have a correctly-exposed picture, even when you're shooting in a hot back-light without reflectors, or with your subject in the dappled shade under a tree. The same is true on interiors, too, only if anything rather more so.

Still, there are some little commonsense points you'd better observe in making incident-light readings this way if you want complete accuracy. In a flat light, either indoors or out, you can get quite accurate results if you just place the meter in the position of the subject's face and point the photocell at the camera. But most of us who have passed beyond the novice stage like a little modeling in our lighting: we like to have a highlight side and a shadow side to our subject. Now, a meter revamped as I've outlined doesn't have the Norwood's patented hemispherical diffuser, which automatically compensates for the angular quality of every bit of light falling on the hemisphere, which in effect represents the subject's face. Since you're working with a flat light-collecting surface, you'll have to make commonsense meter-handling take the place of the rounded collector in making this compensation. If you want to favor the shadow side a bit, simply tilt your meter over a bit to that side when you take your reading, so that about the same proportion of the meter's light-collecting surface is shadowed. With a little practice, you can learn how to do this so that you can "balance" your shadows and highlights to any degree you want. In other words, make your meter read on the illumination falling on the part of the subject you're most interested in, and your overall exposure will take very good care of itself! END.

"Props"

(Continued from Page 259)

is not wasted, as results will show.

Even in long-range, outdoor movies, simple props are often beneficial to lend perspective to a scene. For example, by gently waving a small pine branch a few feet in front of the lens, a striking third-dimensional effect is obtained in a distant mountain view. Such a shot would otherwise be flat and perhaps not very interesting, but the use of this simple prop definitely gives it that "lift" out of the ordinary.

Although, as mentioned above, props are important in giving depth to many distant scenes, they undoubtedly play their leading role in semi-closeups and close-ups. These are the kind of pictures you or I take around home, many times indoors, with limited equipment. We don't have the expensive sets and props of professional studios, but that needn't stop us. Props can make or break an amateur movie as well as a professional one! That is why special attention must be given to every minute detail which appears in the viewfinder. Possibly, you may have to choose between a number of interesting articles that would serve almost equally well as props. Since there are no hard and set rules regarding what is right and what is wrong, let your eye be the judge. You'll find it surprising how often people see things alike in this respect!

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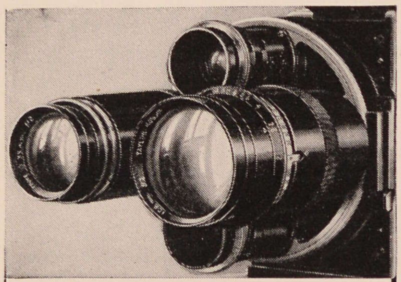
desired props selected, don't be content to "throw" them into the scene. Moreover, do not overdo a good thing by seeing *how many* objects can be squeezed into one scene. They should appear natural, as though they belong there, and not as if they were put there just "to have their picture taken."

Once the general scheme of things is arranged, try shifting the camera to get the best effect. Props are very useful in covering up or eliminating unwanted portions of rooms, thus giving a free choice of camera-angles to insure the most desirable backgrounds. Those in the distance may not even be distinguishable in close-up views because of the short depth of focus resulting from the large lens stops frequently used in this type of work. Nevertheless, they add "that certain something," even though partially out of focus. It is well to bear in mind that these props, though important enough in themselves, seldom should dominate the picture, or divide the attention from the main subject. They usually are *not* the principal interest.



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In color movies, added precaution should be taken in this respect, else the props may appear too prominent because of *color*, even though they would be considerably subdued were the scene in black-and-white. If good balance is maintained both in color and in composition, nothing will look ridiculous or out of place. How much more natural the results will be than with the stiff, unnatural close-ups which are all too common among cine fans.

A trip to your nearest movie theater will convince you of the importance of props, if nothing else will. Carefully analyze each changing scene as it appears on the screen. Notice how true-to-life every detail is. Watch the actors' hands. See how props give them something to do, put them at ease by taking away any trace of self-consciousness.

Page through your favorite magazine. Note the naturalness of the outstanding pictures that attract you as favorites. Chances are that props are to be found there too, though maybe you didn't notice at first glance. They can bolster your own pictures in the same way. True, the large professional studios maintain a special department just for this purpose. But in your own home, if you will but glance around, you will find your own collection of props . . . a fountain pen . . . a book, or better . . . some curtains or a Venetian blind to "dress up" an otherwise bare wall—*anything* to make your scenes more natural, or give your actors "something to do" to overcome camera-fright. Yes, you will see that your own property department can more than fill the bill for any average movie such as you may want to take.

You may be just a casual cinematographer with no aim for "super" productions. But remember, any movie either inside or out, is a *better* movie with suitable props! END.

16mm. Movies For Soldiers

(Continued from Page 258)

racks where the elite rated loge seats on their cots. If they found the picture boring, they could go to sleep. That night they saw, "Thrill a Second," "Run Sheep Run," "Yanks in Africa," Pat Rafferty's "Bull Fight," and Ted Phillips' "Bathing Beauty Parade."

The following Saturday we received a call from the Chaplain of a detail near one of the airports where we had shown pictures three weeks before, asking us to dinner. He said he wanted us especially that day because they were having steaks. We were seated at the officers' table which was set with china plates. They admitted rushing around to find some for us so we wouldn't have to eat from mess-kits.

We asked those around us if they liked the type of pictures we had been showing. They said the boys thought they were very entertaining and the only suggestion they could make would be for the showing of 35mm. features that have been reduced to 16. They mentioned some old pictures they would like to see again such as "Lives of a Bengal Lancer," "Lost Horizon," "Rio Rita," and some Pete Smith Shorts. During that meal I lost any ideas I might have had that our soldiers were not being fed properly.

The camp had two dogs and a pet duck, "Donald." After dinner, Midge asked permission to take pictures of the boys and their pets. They enjoyed this almost as much as seeing the movies and suggested we might find material for a newsreel type of picture made up of the pets of the various camps.

Sometimes the posts had no chairs and the boys would sit on a concrete floor, but they were generally our most receptive audiences for they are stationed where their duties keep so many of them occupied that it is impossible to get a large enough group together to rate one of the regular "live shows" sent out from Hollywood.

Most of our shows have been for small units like this—sometimes just a squad or two stationed at an anti-aircraft or searchlight battery, and sometimes for larger units; our largest audience so far has numbered an unexpected 250. One thing all of these groups have in common: they are constantly on active duty guarding our coast or one of the strategic war plants in our area. Usually they are so isolated that the boys can get only a few short hours' leave in a matter of weeks, or even months, which means that on the rare occasions they get into town, there is only time for essential business, and none for moviegoing or other recreation. One outfit we visited told us that ours was the first entertainment they'd had in eight months! At others, we found that only half or perhaps one-third of the men can be away from their guns at one time, so we've given our show to half the men on one evening, and then repeated it another evening for the other half.

The next Friday the group that went out found the camp they had been assigned to was wired for 60 cycles. The turntables which furnished the synchronous music for some of the silent pictures were for 50 cycles so Midge Caldwell's

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Kodachrome Hawaiian pictures couldn't be shown with sound.

The boys were so disappointed at this that the next day they ran in a special wire from the house across the street and then called in a request for a special showing. The committee by that time was pretty sick of seeing the same pictures over again so Bill Stull, A.S.C., Editor of THE AMERICAN CINEMATOGRAPHER, sent down "Tarzan, Jr." and "Jungle Trails." To those were added a comedy and "Jack Frost."

Afterwards the boys decided to entertain our group and brought out an accordion and sang for us. We were informed they had just acquired a new mascot, so we went out to see it expecting anything from a duck to a St. Bernard dog. We were due for a surprise for it turned out to be a bawling, flapping baby seal named Flipper.

After hearing the circumstances of how they acquired it, Midge immediately sensed a good story for a picture and dated the boys and their mascot up for scenes the following Sunday. She and Ray Fosholdt and Clarence Aldrich spent the three following Sundays completing a clever picture appropriately titled "The Government Seal." The boys invited them to dinner and worked so enthusiastically with them that it made it an added pleasure to produce the film.

Incidentally, as the frequency of our showings has increased, our projection-units have been becoming more and more accustomed to eating—and well!—at Army, Navy and Coast Guard mess-tables. Often they are invited to dine with the officers or men before the show, and afterwards, the boys nearly always insist on serving a special supper of coffee, fresh rolls and fruits, and the like, before taking us home. We can certainly testify that the American Soldier and Sailor live well, and that they are unendingly appreciative of anything like this that we civilians can do for them.

Last week we were invited to see a comedy melodrama skit entitled, "Wild Nell, the Pet of the Plains," or "Her Final Sacrifice." The cast included soldiers from a searchlight battery of a Coast Artillery Anti-Aircraft battalion where we had shown pictures. The boys took both masculine and feminine parts. The play proved so entertaining, that Clarence Aldrich took his sound camera out the following week and with the help of Midge and Ray photographed the play so that the boys could show it to other batteries.

Next to live talent, motion picture entertainment is rated first above all other forms of entertainment at the camps. At our club's last meeting, members volunteered for a certain night each week to show full length sound pictures that are being sent down by the Los Angeles U.S.O. Mobile Unit, with which we are now officially affiliated. So now pictures will be shown at a different camp every night of the week. These films are reduced from current 35mm. pictures that are playing the theaters—or sometimes not even released yet—and are kept up-to-date.

We are all deriving a deep and joyous satisfaction from the knowledge we are bringing entertainment to our armed forces through the movies that have long been a hobby and pleasure to us. We hope other Clubs are doing the same for the Army and Navy Posts stationed nea them. We hesitated to start with just our own members' films, but we soon found out we had full cooperation from motion picture magazine editors, the U.S.O. Mobile Unit, business firms and war production plants who possess entertaining films and are willing to loan them. And the warm appreciation all the men—from commanding Colonels down to buck privates—show for our efforts (even with our silent, amateur films) is enough in itself to make the whole task worthwhile. It sends an indescribable, warm glow over one, which simply can't be put into words. But we hope lots of other amateurs and clubs throughout the country will give themselves a chance to experience it! END.

Rhapsodic Technique

(Continued from Page 251)

the limits of time allowed by changing staccato scenes. It required careful editing to select significant bits of action that would highlight the story to be told. It required accurate cueing of voice, music, and sound-effects.

The rhapsodic technique is not one to be indiscriminately used or carelessly handled. But, from the experience of the producers of "The Thousand Days," it is considered a style that lends itself to further development, and offers extremely interesting possibilities as an important form of motion picture expression. END.

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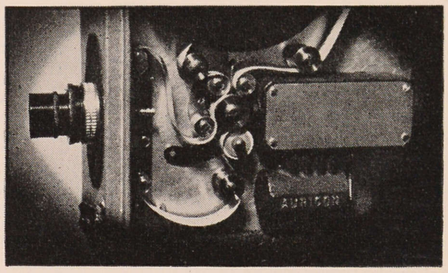

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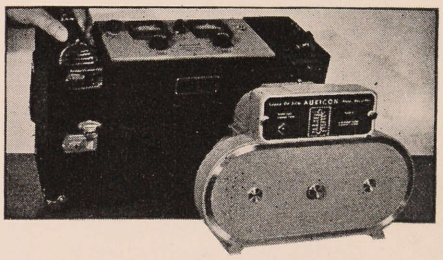

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(Continued from Page 248)

tank's commander, and the tank starts forward.

Inside the tank one feels confidently assured, for to the tough armor of the tank, bullets, fragments of shells and mines, and the like, are like so many peas tossed against a stone wall. There is but one inconvenience: taking pictures is possible only from the open hatch. The regular vision-slits of the tank are so narrow that while they give a fair visual view of the countryside, they are too small for the lenses of our cameras to be put through. So we must stand up and work our good Russian-built "Eyemos" through the open hatch at the top.

Even before we were well started forward, we began to shoot. Close by, a German shell hit a truck which was pulling a field-gun forward to a closer position for direct firing. The truck, which was loaded with shells, is in flames, but the fighters saved the gun, though they have to unhook it from the flaming inferno and roll it away. They do it quietly, methodically . . . in a few minutes the gun is uncoupled from the blazing truck and attached to a new one—on its way forward again. We record all of this little episode of unsung heroism on film.

Our tank moves straight toward the village. Not far from here, other tanks await the order to attack the Germans, who are putting up a stubborn resistance. Our own tank moves a little to one side, to give us a good camera-angle. We begin shooting again. Our subject at last is the village.

The spectacle must be immortalized! The village, which has become the base-point of the German defense, literally seethes with explosions and shell-bursts from our artillery. Every minute thunderous volleys of our shells crashing into it send thick billows of smoke and flame toward the sky. A group of our dive-bombers appear, and they, too, unload their lethal cargoes upon the Germans in the village.

Quickly we reload our cameras. Our cameras are working fine . . . what a difference from our experience last year! Last winter we suffered plenty from having cameras freeze up in the intense cold. The only way to keep them warm at all was to carry them constantly against our chests, under our heavy winter coats. Consequently, many interesting shots were lost. But now we are completely free from this trouble, thanks to cinematographer Dobronitsky, who invented a non-freezing method of lubricating cameras. Now our cameras are working like fine watches!

The tanks start to advance. We take close shots of the caterpillar treads throwing fountains of snow as the tanks move rapidly over the field. Now the Germans are putting up a heavy counter-barrage in front of the village. We film the bursts of the German shells. We film chains of our fighters advancing toward the village. They advance like ghosts in their winter-white camouflage robes, pulling behind them both heavy and hand machine-guns. Not for a second do we stop shooting: when I pause to wind or reload my camera, close by my ear I can hear the steady purr of Bobrov's camera.

During the few days of this battle we photographed over three thousand feet of film. Over in the next sector, cinematographer Verov was doing much the same thing covering his part of the battle. Our negative was rushed back from the front, and our shots were included in the next issue of our National newsreel "SKJ," the Soviet Kino-journal.

Making such films enriches our cameramen with battle experience, but it does more than that. We plan to make many more such scenes from a tank, for films like this give our Soviet home-front audiences an opportunity to be—if only vicariously—right in the middle of a present-day battle in which the men of our heroic Red Army inflict devastating blows against the Hitlerite troops. These pictures show our people what their own soldiers and airmen are doing against the Nazi bandits who have sought to despoil our country. We are happy to see also the films that are beginning to reach us which show our American and British allies in action. And we who man the Soviet cameras will be most happy when the day comes—and come it must—when our advancing armies and we can clasp the hands of our comrades who man the cameras of the American and British Armies in a world where Fascism is no more! END.

Screen Tests

(Continued from Page 249)

who did not want those stars, for the same reason. They had become accustomed to having nothing but the most beautiful women as their stars. How could a distinctly homely woman, no matter how great an actress she might be, be glamorized for the screen?

But our cinematographers, always in the lead in helping to perfect motion pictures eventually proved that producers need not worry about how the player will look. All they need to worry about is how his or her voice will sound and whether or not they can act—the cameramen will put them on the screen in a manner that will make

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Of course, the producer and director must give the cinematographer co-operation and let him be more than just a mechanical camera-cranker if the finest results are to be accomplished. If a director or producer insists on photographing a subject from a bad angle, then the cameraman cannot be blamed for bad results. If the director does not convey to his cameraman the mood of the picture, how can the cameraman put that mood upon the screen? If the producer or unit manager is constantly hounding the cameraman to "stop wasting time fooling with those lights," he is simply cheating himself out of the benefit of the lighting skill for which the cameraman was hired in the first place.

But, getting back to selecting talent without screen tests, I have also just signed another player I have never seen on the screen. He is a young French actor named Harald Ramond, who after fighting with the French Army against the Germans in the great Battle of France, finally escaped occupied France and made his way to America. I took one look at him and felt that here was a man who would be a sensation on the screen, and I signed him to a term contract within ten minutes after meeting him. As in the case of Peggy O'Neill, I never gave a thought to how he would photograph, for I *knew* our American cameramen would place him upon the screen to advantage.

In the case of Peggy O'Neill, I have had a story called "Peggy O'Neill" filed away for several years waiting until the right red-headed Irish type of girl came along to fit the title role. The moment Peggy walked into my office I knew she was the girl I had been looking for. Why bother to wait for a screen test which I knew would be good! Perhaps while waiting she might be signed by someone else. Beautiful of face and figure, five feet and five inches tall, gorgeous brown eyes and a head of red hair such as is rarely seen, an engaging smile, excellent breeding and education, graceful in motion, pleasing in speech—that is Peggy.

Tall, dark-complexioned, black-haired, beautifully chiseled features, manly to the extreme, flashing white teeth—that is Ramond. He and Peggy will make a grand screen couple, and I know our cameramen will present them on the screen in a manner which will bring gasps of excited pleasure from audiences. You may gather from this that I not only am sold on Peggy and Ramond, but on Hollywood's Directors of Photography as well. I am: I know from experience that they are tops! END.

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Documentary At Sea

(Continued from Page 247)

hand) and then used the Special on what later became part of the film's opening sequence — the schooner ploughing through heavy seas with the men walking on deck with that rolling gait peculiar to sailors the world over.

From the build of the schooner, we were not bothered overmuch with direct spray, though it was always present minutely in the air, and we had regularly to go over our equipment with watchmaker's oil to remove the incrusted brine that gradually built up on every surface. Incidentally, we also learned that lenses used continually in the brightness and salt spray of sunlit seas lose their life.

But we didn't have to worry about that—our two weeks on the ocean were too short: the thing that troubled us most was keeping the camera both level and steady on the rolling deck. When the sea was calmer—as it was during our week on the Grand Banks, some three hundred miles offshore—we found we could use ropes, guy-wires and other devices attached to railings and other parts of the vessel to hold the camera down. And a good part of the time, of course, the deck was sufficiently steady to permit a set-up without auxiliary assistance, especially on the homeward voyage when we passed and photographed a convoy outward-bound.

But it wasn't the calm that really helped our film. It was the rough weather. We have both found that people always work much better with us once they see *we* are willing to adapt ourselves to *their* way of life. Only after the dog-team trail up North were we really accepted. And only after the gale, which, figuratively and literally, we stood out, did the "Flora Alberta's" crew so unhesitatingly do everything for us. They never knew how near we were to deserting ship on the third day when another fishing vessel, on its way back to Lunenburg, chanced to pass!

Good sailor though he was, Cinematographer Sinclair had only recently come from a hospital bed and an operation. Our sleeping accommodation was the captain's bunk. It had the dimensions of an oversize herring-tin, and the aroma surrounding it was that of a tin long opened. To a fishing schooner's usual olfactory orgies—oil fumes from the diesel blended with billious bilge stench of fish from voyages innumerable—a new

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stomach-turning perfume was added: the cloying, sickly emmanations of freshly-dried paint.

It wouldn't have been so trying if we'd been able to get on deck; but a gale blew, the vessel was laying-to, and we had to keep to the cabin. It lasted for three days and two nights. In the rolling moments of the second dawn, Sinclair, unable to do what he most wanted—be sick or die—gasped: "Ted, I can't stand it. I've got to get back to Lunenburg. I'm sick. They can row me to the other vessel. It's still near enough. It laid-to all night."

"Okay, Doug," I said, "but I'm staying. Leave the camera and I'll finish the job!"

If steadying shock were possible on the pitching schooner, my words provided it. And if haughty indignation were possible in the embryo-like posture the herring-tin bunk enforced, Sinclair achieved it when he told me he'd rather die than leave the job to me. My face was turned away from him so he couldn't see my gleeful grin. My suggestion—untenable to me—had worked the desired end. Afterwards, on deck, he never even glanced at the other vessel, still laying-to within rowing distance on a sea that was perceptibly abating.

Half the battle in making any documentary successful is to get your people to forget that you are strangers and that your camera is a strange thing. Once the people are your friends, they do not feel you as a stranger; but the camera can still make them self-conscious, especially at close range. That's why many documentary makers — notably Robert Flaherty—use telephoto lenses up to 12 inches so that they may be distant from a subject while actually taking a close-up. With us, it was impossible to get very far away from our fishermen on the deck of the "Flora Alberta"; and besides, we'd nothing larger than a 3-inch lens—all the studio had been able to furnish us.

However, after the gale brought us together, the crew did anything we asked them. They were especially good about not staring at the camera—something which ruins so many documentary shots. We couldn't have told them not "to mug," when "to mug up" meant to eat in Bluenose sea-talk!

They went about their daily tasks for us as if no camera were there. Possibly because the work required full strength and concentration, it made it easier for them to forget the camera. Though in the sequence we took in their fo'c's'l quarters, where they were relaxing in a poker game, they continued in the same natural way . . . so much so that it appears as if the game goes on just as it would have if our lights hadn't flooded the cabin with unnatural brilliance.

We managed these interior shots when the boat was at the fish plant dock and a power hook-up could be made with the town circuit. At sea, the Delco lighting plant had insufficient current for any size photoflood, let alone our five No. 4 Victors.

Another technical difficulty we encountered was photographing the men at work in the dories. These are dropped from the vessel cruising over a three-mile fishing ground. From them the men set their lines; then come back to the vessel (usually for a meal); and afterwards return to the line buoy to haul the fish aboard the dory.

Cinematographer Sinclair was able to get the Eastman Special set up in the bow of one of the dories and photograph the vessel as it slid past during the launching. He was further able to photograph the man pulling in the 300-foot lines laden with cod.

But to get he fisherman setting the lines—playing them out over the side of the dory—here was something that the angle from the dory itself didn't satisfactorily cover. Pulling up the fish, the fisherman's face was continually turning towards the bottom of the dory where the fish were being tossed; but when he set his lines, he faced out to sea. The shot was essential: the lines had to be shown set in order that the later scene make sense when they were pulled up.

We finally found that if the fisherman went through the motion of setting the lines—they're tossed out rhythmically over the end of a short stick—while he stood in the top dory of the stack on deck and the camera angle was low, from the deck upward, a perfect illusion of reality was created. The vessel happened to be rolling nicely, so that the clouds were photographed in motion behind the fisherman. In the black-and-white dupe, from which the cutting copy was edited, these unfortunately didn't register. Criticism immediately arose because the scene looked static; but the point was cleared up the moment a few feet of the master were run through a viewer.

On the "Flora Alberta" our documentary illusions of grandeur momentarily got the better of us. We had an unusual opportunity and sufficient film; and the color everywhere was amazing, wonderfully suited to Kodachrome because blues, reds and yellows predominated, with scarcely any green, always the most unsatisfactory tone register in Kodachrome.

Cinematographer Sinclair expanded our tentative shooting script as he caught every phase of the colorful fishing about him. We sailed through a convoy; he recorded it. We discovered the men hated the sharks which infested the Banks, would lure them to a noose at the ship's stern, then lasso them; he got this.

For once our pretended grandeur was practical. When we returned to the Film Board studio and the rushes were screened, it was decided our material warranted two films: a single-reeler on in-shore fishing and village life, and a two-reeler on the fishing schooner. We completed and recorded these two films before we left the Board. Because the color is so unusual, and it guided the form of the film and the words of the commentary, we are hoping wartime restrictions on Kodachrome prints will not preclude a few being made of our tribute to the Nova Scotian fishing fleet. TO BE CONTINUED.

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TWO SINGLE-LENS TYPE EYEMOS WITH 2″ and 6″ lenses each. Factory rebuilt, $350. Other, excellent condition, $300. R. S. SPEARING, Box 544, JACKSONVILLE, FLA.

WANTED

GUARANTEED HIGHEST PRICES PAID FOR 16MM. CAMERAS—SOUND PROJECTORS 35 MM. Eyemo Cameras, all models; Bell & Howell—Mitchell—Akeley and motors, lenses, accessories, lab. equipment. WRITE US FIRST. THE CAMERA MART, 70 West 45th St., N.Y.C.

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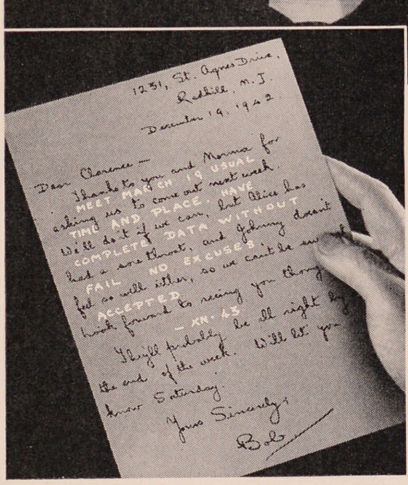
16mm SOUND PROJECTORS, ANY MAKE. CAMERAS, 35mm PROJECTORS, RECORDERS or WHAT HAVE YOU? S.O.S. CINEMA SUPPLY CORPORATION, NEW YORK 18.

(These pictures illustrate methods used—have no connection with actual enemy spy activities)

SPIES' MEETING PLACE . . . To get evidence that will convict, investigators may conceal a Ciné-Kodak in an adjacent room, make thousands of feet of movies of such "business conferences" as that shown here. How the Ciné-Kodak is sound-proofed and arranged to "see" through an innocent-looking wall . . . and other photographic details necessary for satisfactory results . . . can't be told now.

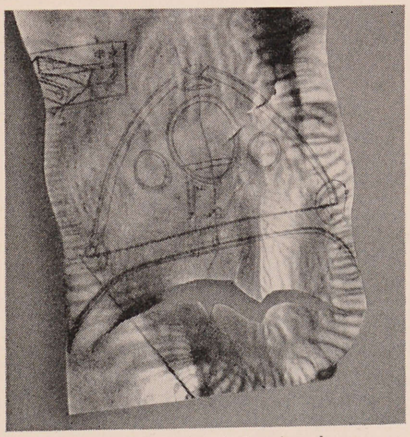


1231, St. Agnes Drive,
Redhill, N.J.
December 19, 1942

Dear Clarence —
Thanks to you and Norma for
asking us to come out next week.
Will do it if we can, but Alice has
had a sore throat, and Johnny doesn't
feel so well either, so we can't be sure
look forward to seeing you thoug
They'll probably be all right by
the end of the week. Will let you
know Saturday.
Yours Sincerely,
Bob

MEET MARCH 19 USUAL
TIME AND PLACE. HAVE
COMPLETE DATA WITHOUT
FAIL NO EXCUSES
ACCEPTED
— XN-43

A CASUAL LETTER loses its "innocence" when a Kodak film, with the aid of ultraviolet rays, discloses the real message—in invisible ink.



BURNING an incriminating document no longer safeguards an enemy agent —Kodak Infrared Film makes fragments of charred paper readable.

"SECRET AGENTS" not so Secret to Kodak's special-purpose films

"MUGGING" the criminal—taking his picture "full figure, full face, and profile"—is the widest use of photography by the police. That's useful—after he's caught.

But first, catch him . . . be sure he's the wanted man . . . get evidence no jury can question . . . these are counter-espionage activities which photography has made an exact science.

A jury will believe what it sees with its own eyes. Photography makes this possible. Cameras are often on the alert near the meeting places of suspected enemy agents—even their "casual" meetings on the street.

Kodak special-purpose films find unseen fingerprints on surfaces dusted with a fluorescent powder . . . unseen chemical erasures, or bloodstains on cloth, when illuminated by infrared or ultraviolet rays . . . telltale differences in ink, or ink strokes, on a document which has been tampered with . . . can even photograph a man in absolute darkness, with the aid of invisible infrared "light."

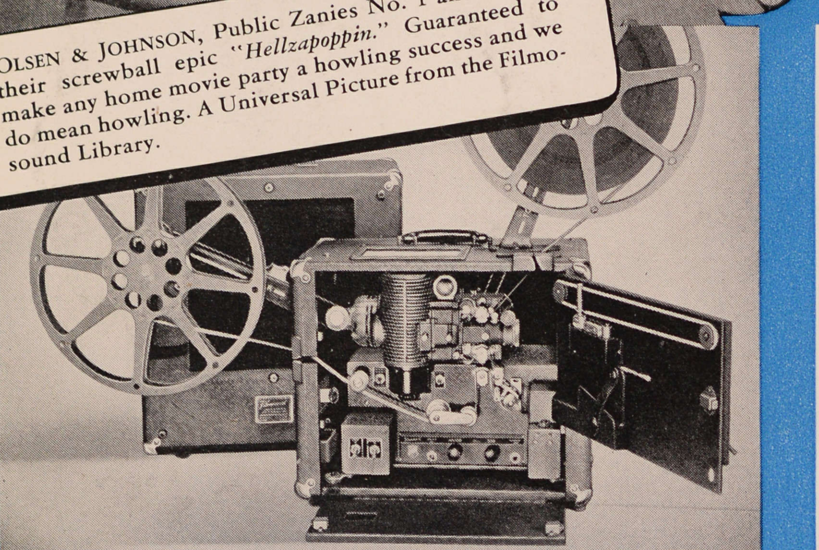
† † †

And photography isn't finished with the enemy agent when he's trapped. Through Kodak's *Recordak System*, the "records" . . . photographs, fingerprints, and police history . . . of 3,000 criminals can be condensed on one small roll of 16-mm. film—for future reference . . . Eastman Kodak Company, Rochester, N. Y.

Serving human progress through Photography

What kind of movies would you like to show in your home?

OLSEN & JOHNSON, Public Zanies No. 1 and 1-A, in their screwball epic *"Hellzapoppin."* Guaranteed to make any home movie party a howling success and we do mean howling. A Universal Picture from the Filmosound Library.



FILMOSOUND V··· — Fulfills every requirement of traditional B&H performance yet is built with limited critical materials. It is available now only to the armed forces. The same skill which perfected the Filmosound V··· — will produce even finer motion picture equipment for you . . . after Victory.

YOU be the boss. Build the kind of a movie program *you'd* like. Travel . . . sports . . . late Hollywood hits with big name stars . . . battle pictures filmed at the front . . . almost any sort of picture you could want . . . all from the Filmosound Library.

This great store of entertainment and instruction has thousands of motion pictures on a vast array of subjects. It is being called on constantly by the Army and Navy for specific educational subjects . . . by industry for job training and morale films . . . by schools for help in educating your children . . . by Civilian Defense groups for special films about their important work . . . and by thousands like you, who enjoy home movies and like to share that enjoyment with their friends.

What kind of movies *would* you like to show at home? The chances are that you'll find them in the Filmosound Library's thousands of subjects.

A Beauty Treatment for Your Own Irreplaceable Movies

You'll be showing your own movies more, now that new film is harder to get . . . and you'll want them in top condition . . . want them to *stay* that way. The exclusive B&H Vap-O-rate film process will do wonders in protecting your precious movies. Your films come out of this proved professional treatment clean and clear—impervious to moisture and oil—amazingly resistant to scratches and heat . . . ready for all the extra times you'll be showing them.

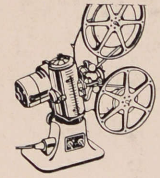
How Long Since Your Projector Had a Checkup?

So gradually do intricate projector parts wear that you may not realize how much smoother your projector *could* operate. Here at Bell & Howell, trained technicians check every mechanism, oil and adjust, repair and replace until your Filmo Projector is every bit as fine as the day it was made. Your B&H dealer can tell you the standard charge on your projector for the kind of checkup you want, and will help you pack your Filmo for safe shipment to the factory. Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London. *Established 1907.*

SEND THIS COUPON *for a catalog and recent supplements of Filmosound Library releases . . . and for information on the Peerless "Vap-O-rate" Film Treatment.*

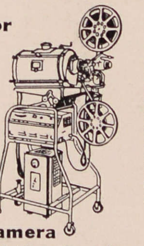
THESE WILL AGAIN BE YOURS TO OWN . . . WHEN THE WAR IS WON

Filmo-Master "400" 8mm. Projector



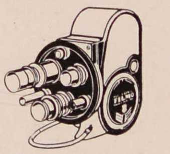
This large-capacity model is the ace of "eights." All-gear drive and power rewind. 400- or 500-watt lamp. Fast F1.6 lens is interchangeable. Full 400-foot reels permit half-hour uninterrupted show.

Filmoarc Projector



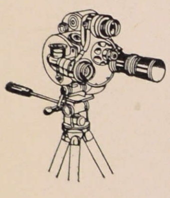
Engineered as an arc projector, this 16mm. model gives plenty of light for large auditoriums. Has high output amplifier and high-fidelity permanent magnet dynamic twin speakers. Shows sound or silent film.

Filmo Turret 8 Camera



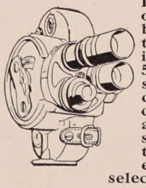
Turret mounts 3 lenses and matching finders. Critical focuser shows full frame through lens. Four speeds including slow motion, also single-frame exposure. Built-in exposure calculator. Footage dial resets automatically.

Eyemo Camera



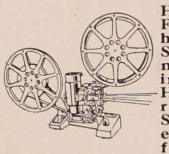
The "tailor-made" camera. Seven standard models plus a complete choice of precision-engineered accessories fit your Eyemo to your specific needs. From quick field work to exacting studio projects . . . Eyemo is ideal.

Filmo 70D Camera



Long-time favorite of serious workers because it gives true theater-quality pictures. Loads 50- or 100-foot spools of 16mm. color or monochrome film. Operates at seven speeds. Three-lens turret head equipped with your selection of fine lenses.

Showmaster Projector



Here's the ideal Filmo for silent home movies. Shows up to 80 minutes of uninterrupted film. Has many fine B&H refinements like Safe-lock sprockets, power rewind, fast F1.6 interchangeable lens, Magnilite condenser which increases screen brilliance 32%, for clearer, sharper images.

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SAVE AND RETURN OLD LAMPS when ordering new ones. New lamps can be shipped *only* when old lamps are turned in.

"E" FOR EXCELLENCE. How the Army-Navy Award for Extraordinary Performance is won and presented is shown in this one-reel sound film. Service charge 50c.

*Opti-onics is the combined sciences of Optics and Electronics. Related and simultaneous research and engineering by Bell & Howell in these and the mechanical sciences have brought important advantages to our fighting forces. Opti-onics will bring many new things to American living, after the war.

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Name...

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I have a .....mm. projector, sound.... silent....

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